DAVID Z. (ZACH) HAMBRICK

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ACADEMIC POSITIONS

Michigan State University, East Lansing, MI *Professor (2013 – present)*

Michigan State University, East Lansing, MI Associate Professor (2006 – 2013)

Michigan State University, East Lansing, MI Assistant Professor (2000 – 2006)

EDUCATION

Georgia Institute of Technology, Atlanta, GA Ph.D., Experimental Psychology (2000)

Georgia Institute of Technology, Atlanta, GA M.S., Experimental Psychology (1997)

Methodist College, Fayetteville, NC B.S., Psychology (1994)

JOURNAL ARTICLES

Google Scholar profile: https://scholar.google.com/citations?user=S2gh4RMAAAAJ&hl=en

<u>2016</u>

*Burgoyne, A. P., Sala, G., Gobet, F., Macnamara, B. N., Campitelli, G., & Hambrick, D. Z. (2016). The relationship between cognitive ability and chess skill: A comprehensive metaanalysis. *Intelligence*. Advance online. *Hambrick graduate student

Ullén, F., Hambrick, D. Z., Mosing, M. A. (2016). Rethinking expertise: A multifactorial gene– environment interaction model of expert performance. *Psychological Bulletin, 142, 427-446.*

Macnamara, B. N., Moreau, D., & Hambrick, D. Z. (2016). The relationship between deliberate practice and performance in sports: A meta-analysis. *Perspectives on Psychological Science*, *11*, 333-350.

Simon, D. J., Walter R. Boot, W. R., Charness, N., Gathercole, S. E., Christopher, C. F., Hambrick, D. Z., & Stine-Morrow, E. A. L. (2016). Do "brain training" programs work? *Psychological Science in the Public Interest, 17,* 108-191.

Hubbard, N.A., Hutchison, J. L., Hambrick, D. Z., Rypma, B. (2016). The enduring effects of depressive thoughts on working memory. *Journal of Affective Disorders, 190,* 208-213.

Mix, K. S., Levine, S. C., Cheng, Y. L., Young, C., Hambrick, D. Z., & Ping, R. (2016). Separate but correlated: The latent structure of space and mathematics across development. *Journal of Experimental Psychology: General, 145,* 1206.

<u>2015</u>

Hambrick, D. Z. & Tucker-Drob, E. M. (2015). The genetics of music accomplishment: Evidence for gene–environment correlation and interaction. *Psychonomic Bulletin & Review, 22,* 112-120.

Fenn, K. M., & Hambrick, D. Z. (2015). General intelligence predicts memory change across sleep. *Psychonomic Bulletin & Review, 22,* 791-799.

Oswald, F. L., McAbee, S. T., Redick, T. S., Hambrick, D. Z. (2015). The development of a short domain-general measure of working memory capacity. *Behavior Research Methods, 47,* 1343-1355.

Morrill, T. H., McAuley, J. D., Dilley, L. C., & Hambrick, D. Z. (2015). Individual differences in the perception of melodic contours and pitch-accent timing in speech: Support for domain-generality of pitch processing. *Journal of Experimental Psychology: General, 144,* 730.

Unsworth, N., Redick, T. S., McMillan, B. D., Hambrick, D. Z., Kane, M. J., & Engle, R. W. (2015). Is playing video games related to cognitive abilities? *Psychological Science*, *26*, 759-774.

<u>2014</u>

Hambrick, D. Z., & Altmann, E. M. (2014). The role of placekeeping ability in fluid intelligence. *Psychonomic Bulletin & Review, 22, 1104-1110.*

Hambrick, D. Z., Oswald, F. L., Altmann, E. M., Meinz, E. J., Gobet, F., Campitelli, G. (2014). Deliberate practice: Is that all it takes to become an expert? *Intelligence, 45,* 34-45

Fenn, K. M., & Hambrick, D. Z. (2014). General intelligence predicts memory change across sleep. *Psychonomic Bulletin & Review, 22,* 791-799.

Macnamara, B. N., Hambrick, D. Z., Oswald, F. L. (2014). Deliberate practice and performance in music, games, sports, education, and professions: A meta-analysis. *Psychological Science*, *25*, 1608-1618.

Ravizza, S. M., Hambrick, D. Z., Fenn, K. M. (2014). Non-academic internet use in the classroom is negatively related to classroom learning regardless of intellectual ability. *Computers & Education*, 78, 109-114.

Altmann, E. M., Trafton, J. G., Hambrick, D. Z. (2014). Momentary interruptions can derail the train of thought. *Journal of Experimental Psychology: General, 143,* 215-226.

Oswald, F. L., McAbee, S. T., Redick, T. S., & Hambrick, D. Z. (2014). The development of a short domain-general measure of working memory capacity. *Behavior Research Methods,* 1-13.

<u>2013</u>

Fenn, K. M., & Hambrick, D. Z. (2013). What drives sleep-dependent memory consolidation? Greater gain or less loss? *Psychonomic Bulletin & Review,* 20, 501-506.

Harrison, T. L., Shipstead, Z., Hicks, K. L., Hambrick, D. Z., Redick, T. S., & Engle, R. W. (2013). Working memory training may increase working memory capacity but not fluid intelligence. *Psychological Science*, *24*, 2409-2419.

Redick, T. S., Shipstead, Z., Harrison, T. L., Hicks, K. L., Fried, D., Hambrick, D. Z., Kane, M. J., & Engle, R. W. (2013). No evidence of intelligence improvement after working memory training: A randomized, placebo-controlled study. *Journal of Experimental Psychology: General*, *142*, 359.

Bailey, H. R., Zacks, J. M., Hambrick, D. Z., Zacks, R. T., Head, D., Kurby, C. A., & Sargent, J. Q. (2013). Medial temporal lobe volume predicts elders' everyday memory. *Psychological Science, 24,* 1113-1122.

<u>2012</u>

Meinz, E. J., & Hambrick, D. Z. (2012). Roles of domain knowledge and working memory capacity in components of skill in Texas Hold'Em poker. *Journal of Applied Research in Memory and Cognition, 1,* 34-40.

Fenn, K. M., & Hambrick, D. Z. (2012). Individual differences in working memory capacity predict sleep-dependent memory consolidation. *Journal of Experimental Psychology: General, 141,* 404-410.

Hambrick, D. Z., Libarkin, J. C., Petcovic, H. L., Baker, K. M., Elkins, J., Callahan, C. N., Turner, S. P., Rench, T. A., & LaDue, N. D. (2012). A test of the circumvention-of-limits hypothesis in scientific problem solving: The case of geological bedrock mapping. *Journal of Experimental Psychology: General, 141,* 397-403.

<u>2011</u>

Hambrick, D. Z., & Meinz, E. J. (2011). Limits on the predictive power of domain-relevant knowledge and experience. *Current Directions in Psychological Science, 20,* 275-279.

Hambrick, D. Z., Rench, T. A., Poposki, E. M., Darowski, E. S., Roland, D., Bearden, R. M., Oswald, F. L., & Brou, R. (2011). The relationship between the ASVAB and multitasking in Navy Sailors: A process-specific approach. *Military Psychology, 23,* 365-380.

Meyer, K. A., Ingersoll, B, & Hambrick, D. Z. (2011). Factors influencing adjustment in siblings of children with autism spectrum disorders. *Research in Autism Spectrum Disorders, 5,* 1413-1420.

Ingersoll, B. & Hambrick, D. Z. (2011). The relationship between the broader autism phenotype, Child severity, and stress and depression in parents of children with autism spectrum disorders. *Research in Autism Spectrum Disorders, 5,* 337-344.

<u>2010</u>

Meinz, E. J., & Hambrick, D. Z. (2010). Deliberate practice is necessary but not sufficient to account for individual differences in piano sight-reading skill: The role of working memory capacity. *Psychological Science, 21,* 914-919.

Hambrick, D. Z., Meinz, E. J., Pink, J. E., Pettibone, J. C., & Oswald, F. L. (2010). Learning outside the laboratory: Ability and non-ability influences on acquiring political knowledge. *Learning and Individual Differences, 20,* 40-45.

Hambrick, D. Z., Oswald, F. L., Darowski, E., Rench, T., & Brou, R. (2010). Determinants of success in multitasking: A synthetic work approach. *Applied Cognitive Psychology, 24,* 1149-1167.

McCabe, D. P., Roediger, H. L., McDaniel, M. A., Balota, D. A., & Hambrick, D. Z. (2010). The relationship between working memory capacity, frontal lobe functioning, and general fluid intelligence: An adult lifespan study. *Neuropsychology*, *22*, 638-644.

<u>2008</u>

Hambrick, D. Z., Pink, J. E., Meinz, E. J., Pettibone, J. C., & Oswald, F. L. (2008). Contributions of ability, personality, and interests to current events knowledge: A longitudinal study. *Intelligence, 36,* 261-278.

Brockmole, J., Hambrick, D. Z., & Henderson, J. M. (2008). The role of meaning in contextual cueing: Evidence from chess expertise. *Quarterly Journal of Experimental Psychology, 61,* 1886-1896.

Darowski, E. S., Helder, E. L., Zacks, R. T., Hasher, L., & Hambrick, D. Z. (2008). Age-related differences in cognition: The role of distraction control. *Neuropsychology*, *22*, 638-644.

Pulido, D. C., & Hambrick, D. Z. (2008). The virtuous circle: Modeling individual differences in L2 reading and vocabulary growth. *Reading in a Foreign Language, 20,* 164-190.

<u>2007</u>

Hambrick, D. Z., Meinz, E. J., & Oswald, F. L. (2007). Predictors of individual differences in current events knowledge: Contributions of ability, personality, and interests. *Memory & Cognition, 35,* 304-316.

Swets, B., Desmet, T., Hambrick, D.Z., & Ferreira, F. (2007). The role of working memory in syntactic ambiguity resolution: A psychometric approach. *Journal of Experimental Psychology: General, 136,* 64-81.

<u>2006</u>

Ettenhofer, M. E., Hambrick, D. Z., & Abeles, N. (2006). Reliability and stability of executive functioning in older adults. *Neuropsychology*, *20*, 607-613.

<u>2005</u>

Hambrick, D. Z., & Oswald, F. L. (2005). Does domain knowledge moderate involvement of working memory capacity in higher-level cognition? A test of three models. *Journal of Memory and Language*, *52*, 377-397.

Kane, M. J., Hambrick, D. Z., & Conway, A. R. A. (2005). Working memory capacity and intelligence are strongly related constructs. Comment on Ackerman, Beier, & Boyle. *Psychological Bulletin, 131,* 66-71.

Conway, A. R. A., Kane, M. J., Bunting, M. F., Hambrick, D. Z., Wilhelm, O., & Engle, R. W. (2005). Working memory span tasks: A methodological review and user's guide. *Psychonomic Bulletin & Review, 12,* 769-787.

Nigg, J. T., Stavro, G., Ettenhofer, M., Hambrick, D. Z., Miller, T., & Henderson, J. M. (2005). Executive functions and ADHD in adults: Evidence for selective effects on ADHD symptom domains. *Journal of Abnormal Psychology, 114,* 706-717.

<u>2004</u>

Kane, M. J., Hambrick, D. Z., Wilhelm, O., Payne, T., Tuholski, S., & Engle, R. W. (2004). The generality of working memory capacity: A latent variable approach to verbal and visuo-spatial memory span and reasoning. *Journal of Experimental Psychology: General, 133,* 189-217.

<u>2003</u>

Hambrick, D. Z. (2003). Why are some people more knowledgeable than others? A longitudinal study of real-world knowledge acquisition. *Memory & Cognition, 31,* 902-917.

<u>2002</u>

Hambrick, D. Z., & Engle, R. W. (2002). Effects of domain knowledge, working memory capacity, and age on cognitive performance: An investigation of the knowledge-is-power hypothesis. *Cognitive Psychology*, *44*, 339-387.

Prior to 2000

Hambrick, D. Z., Salthouse, T. A., & Meinz, E. J. (1999). Predictors of crossword puzzle proficiency and moderators of age-cognition relations. *Journal of Experimental Psychology: General, 128,* 131-164.

Salthouse, T. A., McGuthry, K. E., & Hambrick, D. Z. (1999). A framework for analyzing and interpreting differential age patterns: Application to three measures of implicit learning. *Aging, Neuropsychology, & Cognition, 6,* 1-18.

Salthouse, T. A., Hambrick, D. Z., & McGuthry, K. E. (1998). Shared age-related influences on cognitive and non-cognitive variables. *Psychology and Aging*, *13*, 445-461.

Salthouse, T. A., Fristoe, N., McGuthry, K. E., & Hambrick, D. Z. (1998). Relation of task switching to speed, age, and fluid intelligence. *Psychology and Aging, 13,* 486-500.

Salthouse, T. A., Hambrick, D. Z., Lukas, K. E., & Dell, T. C. (1996). Determinants of adult age differences in synthetic work performance. *Journal of Experimental Psychology: Applied, 2,* 305-329.

Salthouse, T. A., Hancock, H. E., Meinz, E. J., & Hambrick, D. Z. (1996). Interrelations of age, visual acuity, and cognitive functioning. *Journal of Gerontology: Psychological Sciences, 51,* 317-330.

BOOK CHAPTERS

Hambrick, D. Z., & Macnamara, B. N. (2016). Expertise. In S. Whitbourne (Ed.), *The Encyclopedia on Adulthood and Aging* (Vol. 3). Wiley-Blackwell.

Hambrick, D. Z., Macnamara, B. N., Campitelli, G., Ullén, F., Mosing, M. A. (2016). Beyond born versus made: A new look at expertise. *Psychology of Learning and Motivation, 64,* 1-55.

Hambrick, D. Z., & Meinz, E. J. (2012). Working memory capacity and music skill. To appear in T. P. Alloway & Ross G. Alloway (Eds.), *Working memory: The connected intelligences* (pp. 137-155). Psychology Press.

Oswald, F. L., Hambrick, D. Z., & Jones, L. A. (2007). Keeping all the plates spinning: Understanding an predicting multitasking performance. In D. H. Jonassen (Ed.), *Scientific problem solving: The state of the art* (pp. 77-97). Mahwah, NJ: Lawrence Erlbaum.

Kane, M. J., Conway, A. R. A., Hambrick, D. Z., & Engle, R. W. (2007). *Variation in working memory capacity as variation in executive attention and control.* In Conway et al. (Eds.), *Variation in working memory* (pp. 21-48). Oxford University Press.

Hambrick, D. Z. (2005). The role of domain knowledge in complex cognition. In O. Wilhelm & R. W. Engle (Eds.), *Handbook of understanding and measuring intelligence* (pp. 361-372). Thousand Oaks, CA: Sage Publications.

Hambrick, D. Z., Engle, R. W., & Kane, M. J. (2004). The role of working memory in higher-level cognition: Domain-specific vs. domain-general perspectives. In R. J. Sternberg & J. Pretz (Eds.), *Intelligence and cognition* (pp. 104-121). New York: Cambridge University Press.

Hambrick, D. Z., & Engle, R. W. (2003). The role of working memory in problem solving. In R. J. Sternberg & J. E. Davidson (Eds.), *The nature of problem solving* (pp. 176-206). New York: Cambridge University Press.

BOOKS

Hambrick, D. Z., Campitelli, G., & Macnamara, B. N. (Eds., in progress, expected 2017). *The science of expertise: Behavioral, neural, and genetic approaches to complex skill.* Routledge. (Series editors: N. Cowan & D. Balota).

COMMENTARIES, REVIEWS, AND OTHER ARTICLES

*peer-reviewed

Hambrick, D. Z., & Hoffmann, R. (2016). Expertise: A second look. *IEEE Intelligent Systems, 31,* 50-55.

*Macnamara, B. N., Hambrick, D. Z., Moreau, D. (2016). How important is deliberate practice? Reply to Ericsson (2016). *Perspectives on Psychological Science, 11,* 355-358.

Campitelli, G., Connors, M. H., Bilalić, M., & Hambrick, D. Z. (2015). Psychological perspectives on expertise. *Frontiers in psychology*. (Introduction to special issue on expertise)

Hambrick, D. Z., Altmann, E. M., Oswald, F. L., Meinz, E. J., Gobet, F. (2014). Facing facts about deliberate practice. *Frontiers in psychology*, *5*, 1-2.

*Hambrick, D. Z., Altmann, E. M., Oswald, F. L., Meinz, E. J., Gobet, F., Campitelli, G. (2014). Accounting for expert performance: The devil is in the details. *Intelligence, 45,* 112-114

Heitz, R. P, Redick, T. S., Hambrick, D. Z., Kane, M. J., Conway, A. R. A., & Engle, R. W. (2006). WM, Gf, and EF are not the same. *Behavioral and Brain Sciences, 29,* 135-136. Commentary on target article by C. Blair.

Hambrick, D. Z., Wilhelm, O., & Engle, R. W. (2002). What is the role of working memory in learning disabilities? *Issues in Education: Contributions from Educational Psychology, 7,* 87-92. Commentary on target article by H. L. Swanson & L. Siegel.

Hambrick, D. Z. (2002). Review of *Narrative comprehension, causality, and coherence: Essays in honor of Tom Trabasso* (Goldman, Graesser, & van den Broek, Eds.). *Applied Cognitive Psychology, 16,* 234-235.

POPULAR ARTICLES

Hambrick, D. Z., & Burgoyne, A. P. (September 18, 2016). The difference between intelligence and rationality. *The New York Times.* Sunday Review, 12.

Hambrick, D. Z. (September 20, 2016). Is innate talent a myth? Scientific American.

Hambrick, D. Z. (May 31, 2016). Dog intelligence and what it can tell us about our own intelligence. *Scientific American*.

Hambrick, D. Z. (March 29, 2016). Genes and the American dream. Scientific American.

Hambrick, D. Z. (February 23, 2016). The psychology of the breathtakingly stupid mistake. *Scientific American.*

Hambrick, D. Z. (December 22, 2015). Research confirms a link between intelligence and life expectancy. *Scientific American*.

Hambrick, D. Z. (September 22, 2015). What makes a prodigy? Scientific American.

Hambrick, D. Z. (May 26, 2015). How smart should the president be? Scientific American.

Hambrick, D. Z. (April 21, 2015). Winning SCRABBLE and the nature of expertise. *Scientific American.*

Hambrick, D. Z. (December 2, 2014). Brain training doesn't make you smarter.

Hambrick, D. Z., Ferreira, F., & Henderson, J. M. (September 30, 2014). Practice does not make perfect. *Slate.*

Hambrick, D. Z., & Chabris, C. (April 14, 2014). Yes, IQ really matters. Slate.

Hambrick, D. Z. (May 5, 2012). IQ points for sale, cheap. *The New York Times.* Sunday Review, 4.

Hambrick, D. Z. (March 3, 2012). Are experts born or made? The Huffington Post.

Hambrick, D. Z. (January 5, 2012). Intelligence is not the same as value. *The New York Times.* Room for Debate.

Hambrick, D. Z. (December 4, 2011). A good intelligence test. *The New York Times.* Room for Debate.

Hambrick, D. Z., & Meinz, E. J. (November 19, 2011). Sorry, strivers. Talent matters. *The New York Times.* Sunday Review, 12.

Letters to the Editor

Hambrick, D. Z. (March 24, 2014). All of the above. The New Yorker.

Hambrick, D. Z. (September 9, 2013). Mental flabbiness. The New Yorker.

Hambrick, D. Z. (April 3, 2013). Not there yet. New York Times Book Review.

CONFERENCE PRESENTATIONS (SINCE 2000)

Papers

Hambrick, D. Z. (2016). How important is deliberate practice for chess: Re-analysis of a key study. *Annual Convention of the Association for Psychological Science*. Chicago, IL.

Hambrick, D. Z., & Altmann, E. M. (2016). Why is psychometric g the single best predictor of job performance? *Annual Conference of the Society for Industrial-Organizational Psychology.* Anaheim, CA.

Macnamara, B., Moreau, D., & Hambrick, D. Z. (2015). How important is deliberate practice for success in sports? A meta-analysis. *Annual Convention of the Association for Psychological Science*. New York, New York.

Hambrick, D. Z. (2014). Individual differences in expertise: The role of working memory capacity. *Annual Convention of the Association for Psychological Science*. San Francisco, CA.

Hambrick, D. Z. (2014). Talking about individual differences in cognitive ability. *Annual Convention of the Association for Psychological Science*. San Francisco, CA.

Harrison, T. L, Shipstead, Z., Hicks, K. L., Redick, T. S., & Hambrick, D. Z. (2012). Does working memory training improve working memory capacity? *Annual Meeting of the Psychonomic Society, Minneapolis, MN.*

Redick, T. S., Hambrick, D. Z., Shipstead, Z., Harrison, T. L., Hicks, K. L., & Engle, R. W. (2011). Generalization of working memory training to complex cognition. *Annual Meeting of the Psychonomic Society, Seattle, WA.*

Fenn, K., & Hambrick, D. Z. (2011). Individual differences in sleep-dependent memory consolidation. *Annual Convention of the Association for Psychological Science, Washington, DC.*

Hambrick, D. Z., Petcovic, H., Libarkin, J., & Baker, K. (2010). Working memory capacity in the wild: Individual differences in geological field mapping. *International Society for Intelligence Research,* Arlington, VA.

Fenn, K. M., & Hambrick, D. Z. (2010). Individual differences in working memory capacity predicts sleep-dependent consolidation. *Annual Meeting of the Psychonomic Society, St. Louis, MO.*

Redick, T. S., Hambrick, D. Z., Kane, M. J., Unsworth, N., Shipstead, Z. M., & Engle, R. W. (2010). WMC: Weighing up multitasking and cognition. *Annual Meeting of the Psychonomic Society, St. Louis, MO.*

Pulido, D., & Hambrick, D. Z. (2010). The role of L2 print exposure in L2 vocabulary, reading, and working memory development. *British Association of Applied Linguistics*, Aberdeen, Scotland.

Pulido, D., & Hambrick, D. Z. (2010). Revisiting the dynamics of language learning aptitude with L2 learners of Spanish. *Second Language Research Forum,* College Park, MD.

Pulido, D., & Hambrick, D. Z. (2009). Measuring L2 reading comprehension: Skills, cognitive, experiential, and linguistic contributions. *Second Language Research Forum*, East Lansing, MI.

Foss, J., Hambrick, D. Z., & Dralle, D. (2009). The role of L1 and L2 working memory capacity in L2 proficiency. *Second Language Research Forum,* East Lansing, MI.

Hambrick, D. Z., Rench, T. A., Jones, L. A., Oswald, F. L., & Moon, N. (2007). Relations of cognitive and non-cognitive variables to strategy use in multitasking. *Annual Conference of the Society for Industrial and Organizational Psychology, New York, NY.*

Jones, L. A., Oswald, F. L., Bearden, R. M., & Hambrick, D. Z. (2007). NCAPS and SYRUS: Personality and adaptability in multitasking environments. *Navy Workforce Research and Analysis Conference, Arlington, VA.*

Pulido, D. C., Hambrick, D. Z., & Russel, M. (2007). Annual meeting of the American Association for Applied Linguistics, Costa Mesa, CA.

Pulido, D. C., Hambrick, D. Z., & Russel, M. (2006). Variation in L1 and L2 working memory. *Second Language Research Forum, Seattle, WA.*

Pulido, D. C., Hambrick, D. Z., & Russel, M. (2006). *Hispanic Linguistics Society, London, Ontario, CA.*

Mitchell, G., & Hambrick, D. Z. (2006). Predictors of success in law school. *MaxNet Aging Conference, Charlottesville, VA.*

Oswald, F. L., Hambrick, D. Z., & Jones, L. A. (2006). Understanding and predicting Sailor's performance in a multitasking environment: The SYRUS Project. *Navy Workforce Research and Analysis Conference, Falls Church, VA.*

Hambrick, D. Z., Helder, E. A., Hasher, L., & Zacks, R. (2005). The relationship between inhibition and working memory: A latent-variable approach. *Annual Meeting of the Psychonomic Society, Toronto, CA.*

Swets, B., Desmet, T., Hambrick. D. Z., & Ferreira, F. (2005). The role of working memory in syntactic ambiguity resolution: A psychometric approach. *Annual Conference on Architectures and Mechanisms of Language Processing (AMLaP), Ghent, Belgium.*

Hannigan, M. A., Oswald, F. L., & Hambrick, D. Z. (2005). Predicting multitasking performance using measures of ability and personality. *Annual Conference of the Society for Industrial and Organizational Psychology, Los Angeles, CA.*

Hambrick, D. Z. (2002). Determinants of complex cognition: A differential perspective. *Annual Meeting of the Midwestern Psychological Association, Chicago, IL.*

Kane, M.J., Hambrick, D.Z., Tuholski, S.W., Wilhelm, O., Payne, T., & Engle, R.W. (2002). The domain-generality of working memory capacity. *Annual Meeting of the Midwestern Psychological Association, Chicago, IL.*

Kashy, D. A., Oswald, F. L., & Hambrick, D. Z. (2002). Using network technology to enhance learning in large-section social science courses. *Hawaii International Conference on Social Sciences, Honolulu, HI.*

Hambrick, D. Z., & Engle, R. W. (2000). Does domain knowledge reduce age-related differences in cognitive performance? *Annual Meeting of the Southeastern Psychological Association, New Orleans, LA.*

Posters

Burgoyne, A. P., Harris, L. J., & Hambrick, D. Z. (2016). Acquiring skill in music: Does mindset matter? *Annual Meeting of the Midwestern Psychological Association, Chicago, IL.*

Macnamara, B. N., Moreau, D., & Hambrick, D. Z. (2015). How important is deliberate practice for sports? A meta-analysis. *Annual Convention of the Association for Psychological Science, New York, NY.*

Macnamara, B. N., Hambrick, D. Z., & Oswald, F. L. (2013). Deliberate practice and performance in music, games, sports, professions, and education: A meta-analysis. *Annual Meeting of the Psychonomic Society,* Toronto, ON.

Ricks, T. R., Fenn, K. M., & Hambrick, D. Z. (2012). The effect of domain knowledge on false memories. *Annual Meeting of the Psychonomic Society, Minneapolis, MN.*

Fenn, K. M., & Hambrick, D.Z (2012). Sleep-related consolidation: A neglected dimension of general intelligence? *Annual Convention of the Association for Psychological Science, Chicago, IL.*

Sargent, J. Q., Zacks, J. M., Hambrick, D. Z., Zacks, R. T., Eisenberg, M. L., & Beck, T. M. (2011). Event segmentation ability uniquely predicts memory. *Annual Meeting of the Psychonomic Society, Seattle, WA.*

Meinz, E. J., & Hambrick, D. Z. (2010). Predictors of knowledge acquisition in introductory psychology. *Annual Convention of the American Psychological Society, Boston, MA.*

Moon, N., Hambrick, D. Z., & Altmann, E. M. (2007). Determinants of learning from text: The roles of reader and text characteristics. *Annual Meeting of the Psychonomic Society, Long Beach, CA.*

Swensen, E., & Hambrick, D. Z. (2007). Strategy use in the Raven's: Evidence for item subsets and the role of flexibility. *Annual Meeting of the Psychonomic Society, Long Beach, CA.*

Hambrick, D. Z., Hasher, L., Zacks, R. T., Helder, L., & Swensen, E. (2006). Distraction control and age-related differences in working memory. *Cognitive Aging Conference, Atlanta, GA*.

McCabe, D. P., Roediger, H. L., McDaniel, M. A., & Balota, D. A. (2006). The relationship between working memory capacity and frontal lobe functioning: An adult lifespan study. *Cognitive Aging Conference, Atlanta, GA.*

Swensen, E., Helder, E. L., Zacks, R. T., Hasher, L., & Hambrick, D. Z. (2006). Reading with distraction across the adult lifespan. *Cognitive Aging Conference, Atlanta, GA.*

Hambrick, D. Z., Meinz, E. J., & Oswald, F. L. (2004). Individual differences in current events knowledge: Contributions of ability, personality, and interests. *Annual Meeting of the Psychonomic Society, Minneapolis, MN.*

Swets, B., Desmet, T., Hambrick, D. Z., & Ferreira, F. (2004). The role of working memory in relative clause attachment preferences. *Annual Meeting of the Psychonomic Society, Minneapolis, MN.*

Swets, B., Desmet, T., Hambrick, D. Z., & Ferreira, F. (2004). Does implicit prosodic "chunking" mediate individual differences in relative clause attachment preferences. *Annual Conference on Architectures and Mechanisms of Language Processing (AMLaP), Aix-en-Provence, France.*

Swets, B., Desmet, T., Hamrick, D. Z., & Ferreira, F. (2004). The role of verbal and spatial working memory in relative clause attachment preferences. *Annual CUNY Conference on Human Sentence Processing, College Park, MD.*

Hambrick, D. Z. (2003). Does domain knowledge moderate effects of working memory on cognitive performance? *Annual Meeting of the Psychonomic Society, Vancouver, BC.*

Sachek, J., Hambrick, D. Z., Nigg, J., & Henderson, J. M. (2003). Psychometric properties of executive functioning measures in ADHD adults. *Annual Meeting of the American Psychological Society, Atlanta, GA.*

Hambrick, D. Z., Miller, J. L., & Sheldon, K. R. (2002). Effects of age on skilled performance in elite athletes. *Annual Meeting of the Psychonomic Society, Kansas City, MO.*

Hambrick, D. Z. (2002). Why are some people more knowledgeable than others? *Annual Meeting of the Midwestern Psychological Association, Chicago, IL.*

RECENT INVITED TALKS

Hambrick, D. Z. (May 16, 2016). The origins of exceptional performance in the arts: Beyond born versus made. Karolinska Institutet, Stockholm, Sweden.

Hambrick, D. Z. (September 23, 2014). Deliberate practice: Is that all it takes to become an expert? The Empiricist League, Brooklyn, NY.

Hambrick, D. Z. (February 11, 2014). IQ points for sale, cheap. The Empiricist League, Brooklyn, NY.

Hambrick, D. Z. (September 21, 2012). Is spatial ability important for geological problem solving? Western Michigan University.

Hambrick, D. Z. (December, 2011). Fluid intelligence can be increased through less than 10 hours of cognitive training. An extraordinary claim in need of extraordinary evidence. Washington University in St. Louis.

Hambrick, D. Z. (June 9, 2011). Variation in working memory capacity and its role in skilled *performance*. University of Chicago.

Hambrick, D. Z. (April 23, 2010). Variation in working memory capacity and its role in skilled *performance*. Rice University.

Hambrick, D. Z. (October 15, 2010). *Variation in working memory capacity and its role in skilled performance*. University of South Carolina.

Hambrick, D. Z. (November 2, 2010). *Variation in working memory capacity and its role in skilled performance*. University of Maryland.

Hambrick, D. Z. (November 2, 2010). *The relationship between general intelligence and language aptitude.* Center for Advanced Study of Language, College Park, MD.

SELECT PRESS

Research Coverage

9/28/2016, Practice doesn't make perfect. *The New Yorker.* 7/14/2014, How do you get to Carnegie Hall? Talent. *The New York Times,* Science Times. 5/20/2013, 10,000 hours may not make a master after all. *Time.com.*

Interviews

8/1/2016, What does your intelligence show about you? *Stateside,* Michigan Public Radio. 3/15/2016, Forget about it. Your middle-aged brain is not on the decline. *All Things Considered.* 12/4/2015, Are smart presidents better presidents? *The Kathleen Dunn Show,* Wisconsin PR. 12/4/2012, Does brain training make you smarter? *The Daily Circuit,* Minnesota Public Radio 5/2/2012, Can brain training make you smarter? *The Daily Circuit,* Minnesota Public Radio 5/28/2012, Q & A: New evidence shows brain-training games don't work. Smartplanet.com

<u>Quotes</u>

3/16/2015, Older really can mean wiser, *The New York Times*.
1/27/2014, The older mind may just be a fuller mind, *The New York Times*.
9/2012, Piecing together performance. *APS Observer*.
9/2012, Will we continue to get smarter? The Flynn effect says yes. *Scientific American*.

RESEARCH FUNDING

<u>Current</u>

Office of Naval Research (3 years, 2016-2019) The validity and malleability of placekeeping ability PI (Co-PI, Erik Altmann) Total award: \$599,000

U.S. Department of Naval Research (3 years, 2016-2019) *Procedural error and task interruption* Co-PI (PI, Erik Altmann)

Pending

Templeton Foundation (3 years) Understanding what "could be": Heritability in a randomized twin design PI, with Alex Burt; Co-PIs, K. Plaisance, & Q. Lu)

Completed

Navy Personnel Research, Studies, and Technology, 2005-2009 *Multitasking work environment in the Navy culture and values project (SYRUS)* Co-PI with Fred Oswald (Department of Psychology, Rice University) Total award: \$261,523, 2005-2007; \$455,000, 2007-2009

National Science Foundation, 2009-2012 Learning across the expert-novice continuum: Cognitive in the geosciences Co-PI with J. Libarkin (MSU) & H. Petcovic (PI, Western Michigan University) Total award: \$998,000

Office of Naval Research, 2009-2012 Understanding the nature of variation in working memory capacity R. W. Engle & D. Z. Hambrick Total award: \$900,000

Michigan State University Intramural Research Grant, 2003 (I think) Development and maintenance of legal reasoning PI, with Greg Mitchell (MSU-Detroit College of Law) Total award: \$50,000

Grant Consulting

Event segmentation Across the Life-Span, NIH PI: Jeffery M. Zacks Role: Developmental of individual-difference measures; data analysis

Aging and the contents of working memory, NIH PI: Lynn Hasher; Co-PI: Rose Zacks Role: Developmental of individual-difference measures; data analysis

TEACHING AND ADVISING

Courses and student ratings

1 = Instructor Involvement, 2 = Student Interest, 3 = Student-Instructor Interaction, 4 = Course Demands, 5 = Course Organization. Values reflect multiple items, rated on scale ranging from 1 (best rating) to 5 (poorest rating).

		1	2	3	4	5
Year/Term	Course	Instruct. Involve.	Student Interest	Instruct. Interact.	Course Demand	Course s Organ.
2000 Fall	Introductory Psychology	1.78	2.29	2.01	2.34	1.81
2001 Fall	Introductory Psychology	1.93	2.32	2.10	2.36	2.10
2002 Spring	Introductory Psychology	1.80	2.49	1.61	2.41	1.92
2002 Fall	Cognitive Psychology	1.58	2.14	2.06	2.12	1.68
2003 Fall	Memory & Skill	1.61	2.06	1.98	2.22	2.14
2004 Spring	Introductory Psychology	1.91	2.41	2.40	2.57	2.30
2004 Fall	Introductory Psychology	2.11	2.43	2.41	2.51	2.35
2005 Fall	Variation in Working Memory (grad. sem.)	1.77	1.77	1.65	2.36	2.19
2005 Spring	Introductory Psychology	2.01	2.35	2.34	2.42	2.25
2006 Fall	Introductory Psychology	1.82	2.39	2.35	2.40	2.15
2007 Spring	Cognitive Psychology	1.80	2.45	2.34	2.29	2.17
2007 Fall	Introductory Psychology	1.91	2.41	2.43	2.48	2.16
2008 Fall	Introductory Psychology	1.67	2.15	2.11	2.16	1.83
2009 Spring	Cognitive Psychology	1.58	2.17	1.91	2.17	1.80
2009 Fall	Introductory Psychology	2.00	2.37	2.48	2.41	2.06
2010 Spring	The Psychology of Success	1.17	1.55	1.12	1.41	1.37
2010 Fall	Introductory Psychology	1.48	2.08	2.09	2.00	1.61
2011 Spring	The Psychology of Success	1.15	1.50	1.55	2.07	1.50
2011 Fall	Introductory Psychology	1.59	2.21	2.08	2.23	1.84
2012 Spring	The Psychology of Success	1.50	1.67	1.39	1.65	1.56
2012 Spring	The Psychology of Success	1.28	1.52	1.20	1.56	1.48
2012 Fall	Introductory Psychology	1.59	2.15	1.93	2.11	1.75
2013 Spring	Expertise & Skill	1.50	1.80	1.42	1.70	1.80
2014 Fall	Introductory Psychology	1.55	2.03	2.00	2.08	1.86
2014 Spring	Expertise & Skill	1.36	1.81	1.27	1.72	1.87
2015 Fall	Introductory Psychology	1.61	1.96	2.04	2.07	1.76
2016 Spring	Expertise & Skill	1.38	1.78	1.36	1.69	1.75

Graduate advisees

Alex Burgoyne (2015 – present) Emily Darowski (M.A., 2007; Ph.D., 2011) Tom Wagner (M.A., 2006) Nicole Moon (M.A., 2007)

Undergraduate thesis advisees

Janna Wittenberg (2003) Shannon McKinney (2005) Jeffery Pink (2005) Andrew Mattarella-Micke (2006) Haritha Reddy (2004)

SERVICE

Chair, Cognition and Cognitive Neuroscience area (2015 – present)

Department committees

Colloquium Committee (2001 – 2002) Graduate Curriculum Committee (2005) Departmental Advisory Committee (2008 – 2009)

University committees

College curriculum (2013 – 2015)

Ad hoc reviewing

Acta Psychologica; Aging, Neuropsychology, and Cognition; American Journal of Psychology; Child Development; Cognition; Cognitive Psychology; Journal of Experimental Psychology: Applied; Journal of Experimental Psychology: Learning, Memory, and Cognition; Journal of Experimental Psychology: General; Journal of Experimental Child Psychology; Journals of Gerontology: Psychological Sciences; Journal of Memory and Language; Memory; Memory & Cognition; Neuropsychology; Personality and Individual Differences; Psychology and Aging; Psychological Bulletin; Psychonomic Bulletin & Review; Psychological Science; Quarterly Journal of Experimental Psychology; Visual Cognition

National Science Foundation Riksbankens Jubileumsfond (equivalent to Swedish NSF)

<u>Editing</u>

Associate Editor, *Journal of Experimental Psychology: General* (2014 – present) Book Review Editor, *Intelligence* (2015 – present)

Editorial Board, *Journal of Experimental Psychology: General* (2008 – 2013) Editorial Board, *Intelligence* (2011 – present) Editorial Board, *Journals of Gerontology: Psychological Sciences* (2007 – present)

Managing guest editor (co-editor, Randall W. Engle) of special issue of *Journal of Applied Research on Memory and Cognition,* "Working memory in the wild." (To be completed, 11/2017)

AWARDS AND HONORS

2001 James McKeen Cattell Award for Outstanding Dissertation in Psychology New York Academy of Sciences

MEMBERSHIPS

Fellow, Association for Psychological Science (APS) Associate Member, Psychonomic Society Member, Society for Applied Research on Memory and Cognition (SARMAC)

IMPACT

Google Scholar: h-index: 34 Citations: 7,090

Web of Science:

h-index: 23 Citations (non-self): 3,025