VITA

**David L. Strayer**

Department of Psychology

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***Date of Birth***: September 12, 1957

***Family***: wife, Kay; sons Kyle & Sean

***Educational History***: 1989 Ph.D. University of Illinois at Urbana-Champaign

Major: Experimental Psychology

Minors: Quantitative, Biological

1982 M.S. Eastern Washington University

Major: Experimental Psychology

1980 B.A. Eastern Washington University

Majors: Psychology, History

***Professional History***

2004 – Present Professor, Department of Psychology, University of Utah

 Director of the Applied Cognition Laboratory

 Adjunct Professor, Dept. of Educational Psychology, University of Utah

1995 ‑ 2004 Associate Professor, Department of Psychology, University of Utah

1991 ‑ 1995 Assistant Professor, Department of Psychology, University of Utah

1990 ‑ 1991 Member of Technical Staff, Network Architecture and Services

 Laboratory, GTE Laboratories

1989 ‑ 1990 Post‑Doctoral Research Associate, Department of Psychology,

 University of Illinois at Urbana-Champaign

1982 ‑ 1988 Teaching and Research Assistant, Department of Psychology,

University of Illinois at Urbana-Champaign

1980 ‑ 1982 Teaching and Research Assistant, Department of Psychology,

Eastern Washington University

***Awards***

SHIFT award for Research on Nature & Cognitive Restoration, The Center for Jackson Hole, 2019

Green Cross Safety Research Advocate Award finalist, National Safety Council, 2018

John R. Park Professor of Psychology (2018-2022)

Celebrate U Top Researcher Honoree, University of Utah, 2017

National Forest Service Wilderness Stewardship Research Award, US Forest Service, 2016

Jerome Ely Human Factors Article award for best article in the 2015 volume of *Human Factors*

Fellow of the Association for Psychological Sciences, 2012

Interdisciplinary Teaching Grand Award (The Psychology of Traffic), 2011

University of Utah Distinguished Scholarly and Creative Research Award, 2010

College of Social and Behavioral Sciences Superior Teaching Award Finalist, 2010

*Discover Magazine’s* 100 Top Science Stories of 2005

John Park Teaching Fellowship, 2004

*Discover Magazine’s* 100 Top Science Stories of 2003

College of Social and Behavioral Sciences Superior Research Award, 2002

John Park Teaching Fellowship, 1997

College of Social and Behavioral Sciences Superior Research Award Finalist, 1995 (Jr. Award)

Sigma Xi research paper award, 1988

Paul D. Doolen Graduate Scholar for the Study of Aging, 1987

NASA/AMES Research Fellowship, 1985‑87

Outstanding academic student at Eastern Washington University, 1982

Debra White Memorial Scholarship for academic achievement, 1979

***Research Interests***

Attention and Multitasking

The Psychology of Traffic

Skill Acquisition and Skilled Performance

Mathematical Modeling of Human Performance

Cognitive Psychophysiology

Cognition and Nature

***Teaching Interests***

Cognitive Psychology

Sensation and Perception

Attention and Skill Acquisition

Human Factors and Engineering Psychology

Cognition in the *Wild*

***Professional Organizations***

The Association for Psychological Society

The Psychonomic Society

The Human Factors Society

***University of Utah Committees and Service***

Academic Senate (2001-2003)

College Technology Committee (1998, chair, 1999)

CNS Area Head (1998-2003, 2019-2020)

Graduate Council Review

 Civil and Environmental Engineering (2007)

 Chemistry (2013)

Institutional Review Board (1998-2003)

Research Participation Committee (1991-1996, 2014)

Personnel Committee (2011-2013, 2017, 2019-2020)

Psychology Technology Committee (1999-2002)

Undergraduate Committee (2010, chair 2012-2015)

Executive Committee (2015, 2020)

College RPT Committee (2015-2016, chair 2017)

Graduate Committee (2016)

Development and Public Outreach Committee (2016)

***Graduate Student Supervision***

* Gregory B. Malley, M.S.
* Sarah Grison, M.S./Ph.D.
* Joel M. Cooper, Ph.D.
* Nathan (Medeiros) Ward, Ph.D.
* James R. Coleman, Ph.D.
* Jonna M. Turrill, Ph.D.
* Rachel J. Hopman, Ph.D.
* Spencer C. Castro, Ph.D.
* Emily E. Scott, Ph.D.
* Sara B. LoTemplio, M.S.
* Amy S. McDonnell, M.S.

***Editorial Duties and Service***

Consulting Editor for *Perception and Psychophysics, 1994-1999*

Consulting Editor for the *Journal of Experimental Psychology: Human Perception and Performance*, 1999-2004

Guest Editor for the special issue of *Human Factors* on driver distraction (2004)

Consulting Editor for the *Journal of Experimental Psychology: Applied*, 2005-2009

Consulting Editor for *Frontiers of Cognition* (2010 - present)

Ad Hoc Reviewer for *Journal of Experimental Psychology: Learning, Memory, & Cognition, Journal of Experimental Psychology: Human Perception and Performance, Journal of Experimental Psychology: General, Psychonomic Bulletin & Review*, *Psychological Science, Perception and Psychophysics, Quarterly Journal of Experimental Psychology, Memory & Cognition, American Journal of Psychology, Journal of Accident Analysis & Prevention, Human Factors*

Member of the *NASA Life and Biomedical Sciences and Applications* Division‑wide Peer Review Panel, 1994-1995

Member of the Utah Legislative *Task Force on Inattention and Driving* (1999)

Participant at the *National Distracted Driving Summit* in Washington D.C. (2009, 2010)

Testifying in committees of the *Utah State Legislature* (2009, 2010)

United States House and Senate briefings on Driver Distraction (5/5/10 and 5/6/10)

United States House and Senate briefings on Driver Distraction (6/13/2013)

Chair of Search Committee for the Editor of *Behavior Research Methods* (2013)

Invited participant at the National Transportation Safety Board Roundtable on *Disconnecting from Deadly Distractions* held in Washington D.C. (March 31, 2015)

Invited participant at the National Highway Traffic Safety on *Cognitive Distractions: What Were You Thinking?* held in Washington D.C. (May 12, 2015)

Invited participant at the White House Roundtable on *The Heath Benefits of the Outdoors*, held in Washington, D.C. (October 20, 2016).

Organized and hosted the International Forum on Impact of Vehicle Technologies and Automation on Users held at the University of Utah, Salt Lake City, UT (November 7-8, 2017) in conjunction with the AAA Foundation for Traffic Safety.

Member of the *Utah Road Usage Charge Advisory Committee* (reporting to the Utah Department of Transportation in response to Utah S.B. 136, (2018).

Guest Editor for the special issue of *Human Factors* on measuring cognitive workload (2020)

***Research Support***

University of Illinois dissertation research grant, 1988, $750.

National Institute of Health, "Aging and the Development of Automatic Processing", 1989‑1990, $38,050 (co‑PI with A. Kramer).

National Institute of Health, "Development of Skilled Performance in the Elderly", 1991‑1993, $213,636 (co‑PI with A. Kramer).

University Research Committee Grant, “Separating Strategic and Automatic Components of Skill Acquisition and Skilled Performance”, 1991. $5000.

National Institute of Health, "An Information Processing Approach to Autism", 1994‑1999, $520,038 (co‑I with S. Ozonoff).

University Research Committee Grant, “ERP Studies of Novel Popout”, 1995. $5000.

University Research Instrumentation Grant, 1996. $8000.

University Research Committee Grant, “Event-related Brain Potential Studies of the Negative Priming Effect”, 1998. $6000.

National Institute of Health: Bioengineering Research Partnership, “Data Display to Detect/Diagnose/Treat Critical Events”, 1999-2004, $2,221,179 (co-PI with Dwayne Westenskow et. al.).

National Institute of Mental Health, “The Deautomatization of Attitudes”, 2000-2002, $149,500 (co-PI with David M. Sanbonmatsu).

National Aeronautics and Space Administration, “Graphic Displays to Facilitate Rapid Discovery, Diagnosis, and Treatment of Medical Emergencies”, 2001-2002, $100,000.

 (co-PI with Frank Drews).

Federal Aviation Administration, “Alcohol, Divided Attention, Performance, and Gene Expression”, 2002, $30,633.

Utah Department of Transportation, “Simulator Training of Maintenance Workers”, 2003-2004, $195,173.

National Institute of Child Health and Human Development, Cell-phone-induced distraction in adolescent drivers, 2005-2006, $140,500 (co-PI with Michael Kramer).

Utah Department of Transportation, “Targeted and Adaptive Simulator Training for Winter Maintenance”, 2005-2006, $77,010.

Idaho National Laboratory, “Brains and Chips: System for Analyzing Differences in Imagery”, 2005, $85,122.

Interdisciplinary Research Grant, “Meet the Super Taskers: Identifying Genetic and Neural Markers of Extraordinary Cognitive Reserve”, 2009, $12,000 (co-PI with Jason Watson).

AAA Foundation for Traffic Safety, “Measuring Cognitive Distraction in the Vehicle”, 2011-2012, $522,916.

University of Utah Research Instrumentation Award, “Request for a High-Fidelity Driving Simulator”, (2011), $100,000 plus matching funds from Drive Safety for a total award of $180,000.

National Science Foundation, “Electrophysiological evidence for hierarchical error detection in skilled typewriting”, (2011), $17,476 (subcontract with Vanderbilt University).

AAA Foundation for Traffic Safety, “Measuring Cognitive Distraction in the Vehicle” - extension of original scope of work and budget, 2012-2013, $ 63,587.

Mountain-Plains Consortium, “The Effect of Multi-tasking on Self Assessments of Driving Performance” 2012-2013, $44,880 (co-PI with David Sanbonmatsu).

Federal Highways Administration, “Reducing Roadway Departure Crashes at Horizontal Curve Sections on Rural, Two-Lane Highways”, 2012-2013, $187,280 (co-PI with R.J. Porter and Joel Cooper).

AAA Foundation for Traffic Safety, “Examining Speech-based Interactions with In-Vehicle Technology”, 2013-2014, $295,629.

National Academies Keck Futures Initiative, “Nature and Cognitive Restoration: How does the Brain Behave in a Non-digital World?”, 2013-2015, $50,000.

AAA Foundation for Traffic Safety, “Phase III: Measuring Cognitive Distraction in the Vehicle” - extension of original scope of work and budget, 2014-2015, $476,949.

Mountain-Plains Consortium, “Self-regulation and Distraction” 2014-2015, $57,670 (co-PI with David Sanbonmatsu).

National Institute for Transportation and Communities, Changing Attitudes Toward Sustainable Transportation:  The Impact of Meta-arguments", 2014-2016, $75,458 (co-PI with David Sanbonmatsu).

AAA Foundation for Traffic Safety, “Phase IIIa: Measuring Cognitive Distraction in the Vehicle - extension of original scope of work and budget”, 2014-2015, $355,470.

AAA Foundation for Traffic Safety, “A Comprehensive Assessment of Cognitive and Visual Workload in Vehicles – Phase IV”, 2015-2016, $689,500.

AAA Foundation for Traffic Safety, “The Establishment of a Comprehensive Program to Evaluate Cognitive, Visual, and Manual Workload in New Vehicles”, 2016-2018, $3,864,000.

University of Utah Seed Grant, “ Spectral EEG and Driver Physiology to Monitor Driver Mindwandering” 2017-2018, $29,600 (Co-PI with Francesco Biondi).

AAA Foundation for Traffic Safety, “A Research Program to Assess Vehicle Automation on Younger and Older Drivers’ Workload and Performance”, 2019, $977,558.

AAA Foundation for Traffic Safety, “An Experimental and Naturalistic Assessment of Practice and Vehicle Automation on Driver’s Workload”, 2020-2022, $1,599,816.

*Publications*

Coles, M. G. H., & Strayer, D. L. (1985). The psychophysiology of the cardiac cycle time effect. In Orlebeke, J. F., Mulder, G., & van Doornen, L. J. P. (Eds.), *Psychophysiology of Cardiovascular Control*. New York: Plenum Press, pp. 517‑534.

Braune, R., Wickens, C. D., Strayer, D. L., & Stokes, A. F. (1985). Age‑dependent changes in information processing abilities between 20 and 60 years. In Swezey, R. W. (Ed.), *Proceedings of the Human Factors Society, 29th Annual Meeting*. pp. 226‑230, Baltimore, MD.

Strayer, D. L., Wickens, C. D., & Braune, R. (1987). Adult age differences in the speed and capacity of information processing II: An electrophysiological approach. *Psychology and Aging*, *2*, 99‑110.

Gehring, W. J., Strayer, D. L., Kramer, A. F., Donchin, E., & Miller, G. A. (1987). An evaluation of age differences in the development of automaticity. *Proceedings of the 4th International Conference of Neurosciences*, Paris‑Dourdan, France.

Kramer, A. F., & Strayer, D. L. (1988). Assessing the development of automatic processing: An application of dual‑task and event‑related brain potential methodologies. *Biological Psychology*, *26*, 231‑267.

Kramer, A. F., Strayer, D. L., & Buckley, J. (1989). Factors influencing the development and transfer of automatic processing. *Proceedings of the Human Factors Society*, 33rd *Annual Meeting*, pp. 1248‑1252.

Strayer, D. L., & Kramer, A. F. (1990). Attentional requirements of automatic and controlled processing. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *16*, 67‑82.

Strayer, D. L., & Kramer, A. F. (1990). An analysis of memory‑based theories of automaticity. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *16*, 291‑304.

Kramer, A. F., Strayer, D. L., & Buckley, J. (1990). Development and transfer of automatic processing. *Journal of Experimental Psychology: Human Perception and Performance*, *16*, 505‑522.

Kramer, A. F., Strayer, D. L., & Buckley, J. (1991). Task versus component consistency in the development of automatic processing: A psychophysiological assessment. *Psychophysiology*, *24*, 425‑437.

Kramer, A. F., Coyne, J. T., & Strayer, D. L. (1991). Human performance at the roof of North America. *Proceedings of the Human Factors Society*, 35th *Annual Meeting*, pp. 561‑565.

Kramer, A. F., & Strayer, D. L. (1991). Separating strategic and data‑driven components of skilled performance. *Proceedings of the 32nd Annual Meeting of the Psychonomics Society*, p. 50.

Mecklinger, A., Kramer, A. F., & Strayer, D. L. (1992). Event related potentials and EEG components in a semantic memory search task. *Psychophysiology*, *29*, 104‑119.

Kramer, A. F., Coyne, J. T., & Strayer, D. L. (1993). Cognitive function at high altitude. *Human Factors*, *35*, 329‑344.

Sirevaag, E. J., Kramer, A. F., Wickens, C. D., Reisweber, M., Strayer, D. L., & Grenell, J. H. (1993). Assessment of pilot performance and mental workload in rotary wing aircraft. *Ergonomics*, *9*, 1121‑1140.

Larish, J., Kramer, A., DeAntonna, J., & Strayer, D. L. (1993). Aging and dual‑task training. *Proceedings of the Human Factors Society*, 37th *Annual Meeting*, Seattle, WA.

Strayer, D. L., & Kramer, A. F. (1993). Strategies and automaticity: Implications for part‑task training. *Proceedings of the Human Factors Society*, 37th *Annual Meeting*, Seattle, WA.

Strayer, D. L., & Kramer, A. F. (1994). Strategies and automaticity I: Basic findings and conceptual framework. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *20*, 318‑341.

Strayer, D. L., & Kramer, A. F. (1994). Strategies and automaticity II: Dynamic aspects of strategy adjustment. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *20*, 342‑365.

Ozonoff, S., Strayer, D. L., McMahon, W., & Filloux, F. (1994). Executive function abilities in autism and Tourette syndrome: An information processing approach. *Journal of Child Psychology and Psychiatry*, *35*, 1015‑1032.

Kramer, A. F., Humphrey, D. G., Larish, J. F., Logan, G. D., & Strayer, D. L. (1994). Aging and inhibition: Beyond a unitary view of inhibitory processing in attention. *Psychology and Aging*, *9*, 491‑519.

Strayer, D. L., & Kramer, A. F. (1994). Aging and skill acquisition: Learning‑performance distinctions. *Psychology and Aging*, *9*, 589‑605.

Kramer, A. F., Larish, J., & Strayer, D. L. (1995). Training strategies for attentional control in dual‑task settings: A comparison of young and old adults. *Journal of Experimental Psychology: Applied*, *1*, 50-76.

Malley, G. B., & Strayer, D. L. (1995). Effects of stimulus repetition on positive and negative identity priming. *Perception and Psychophysics*, *57*, 657-667.

Strayer, D. L. (1996). Skill acquisition. In J. E. Birren (Ed.) Encyclopedia *of Gerontology: Age, Aging, and the Aged*, Academic Press, Orlando FL (pp. 489-495).

Ozonoff, S., & Strayer, D. L. (1997). Inhibitory function in nonretarded autistic children. *Journal of Autism and Developmental Disorders,* *27*, 59-76.

Strayer, D. L. (1997). Testing race models of visual search. *Journal of Experimental Psychology: Human Perception and Performance*, *23*, 566-581.

Johnston, W. A., Strayer, D. L., & Vecera, S. P. (1998). Broad mindedness and perceptual flexibility: Lessons from dynamic ecosystems. In J. S. Jordan (Ed.) *Systems Theory and a Priori Aspects of Perception*, Elsevier (pp. 87-103).

Ozonoff, S., Strayer, D. L., McMahon, W. M., & Filloux, F. (1998). Inhibitory deficits in Tourette syndrome as a function of comorbidity and severity. *Journal of Child Psychology and Psychiatry*, *39*, 1109-1118.

Strayer, D. L., & Grison, S. (1999). Negative identity priming is contingent on stimulus repetition. *Journal of Experimental Psychology: Human Perception and Performance*, *25*, 24-38.

Gardner, M. K., Strayer, D. L., Woltz, D. J., & Hill, R. D. (2000). Cognitive skill acquisition, maintenance, and transfer in the elderly. In R. D. Hill, L. Backman, & A. S. Neely (Eds.) *Cognitive Rehabilitation in Old Age*, Oxford University Press, New York, NY (pp. 42 - 60).

Strayer, D. L., & Johnston, W. A. (2000). Novel popout is an attention-based phenomenon: An ERP analysis. *Perception and Psychophysics, 62*, 459-470.

Ozonoff, S., & Strayer, D. L. (2001). Brief Report: Further evidence of intact working memory in autism. *Journal of Autism and Developmental Disorders*, *31*, 257-263.

Grison, S., & Strayer, D. L. (2001). Negative priming and perceptual fluency: More than what meets the eye. *Perception and Psychophysics*, *63*, 1063-1071.

Strayer, D. L., & Johnston, W. A. (2001). Driven to distraction: Dual-task studies of simulated driving and conversing on a cellular phone.*Psychological Science*, 12, 462-466.

Kramer, A. F., & Strayer, D. L. (2001). Influence of stimulus repetition on negative priming. *Psychology and Aging*, *16*, 580-587.

Strayer, D. L., Drews, F. A., Albert, R. W., & Johnston, W. A. (2001). Cell phone induced perceptual impairments during simulated driving. In D. V. McGehee, J. D. Lee, & M. Rizzo (Eds.) *Driving Assessment 2001: International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design. Published by the Public Policy Center, University of Iowa* (pp. 14-19).

Johnston, W. A., & Strayer, D. L. (2001). A dynamical, evolutionary perspective on attention capture. In C. Folk & B. Gibson (Eds.), *Attraction, Distraction and Action; Multiple Perspectives on Attentional Capture*. Elsevier (pp. 375-397).

Drews, F. A., Agutter, J. Syroid, N. D., Albert, R. W., Westenskow, D. R., & Strayer, D. L. (2001). Evaluating a graphical cardiovascular display for anesthesia. *Proceedings of the 41st Annual Meeting of the Human Factors Society.*

Albert, R. W., Drews, F. A., Strayer, D. L., Syroid, N. D., Westenskow, D. R., Agutter, J., Loeb, R. G., & Weinger, M. B. (2001). Facilitation of anesthetic administration during simulated surgeries with a drug display. *Proceedings of the 41st Annual Meeting of the Human Factors Society*.

Syroid, N.D., Agutter, J., Drews, F. A., Westenskow, D. R., Albert, R. W., Bermudez, J. C., Strayer, D. L., Prenzle, H., Loeb, R. G., & Weinger, M. B. (2002). Development and evaluation of a graphical anesthesia drug display. *Anesthesiology*, 96, 565-574.

Filoteo, J. V., Rilling, L. R., & Strayer, D. L. (2002). Negative priming in patients with Parkinson’s Disease: Evidence for a role of the striatum in inhibitory attentional processes. *Neuropsychology*, 16, 230-241.

Strayer, D. L., Drews, F. A., & Albert, R. W. (2002). Negative priming and stimulus repetition: A reply to Neill and Joordens (2002). *Perception and Psychophysics*, *64*, 861-865.

Strayer, D. L. (2002). Review of engineering psychophysiology: Issues and applications. *Psychophysiology*, *39*, 406-407. [Book Review]

Strayer, D. L., Drews, F. A., & Johnston, W. A. (2003). Cell phone induced failures of visual attention during simulated driving. *Journal of Experimental Psychology: Applied*, 9, 23-52.

Agutter, J., Drews, F. A., Syroid, N.D., Westenskow, D. R., Albert, R. W., Strayer, D. L., Bermudez, J. C., & Weinger, M. B. (2003). Evaluation of a graphical cardiovascular display in a high fidelity simulator. *Anesthesia & Analgesia*, *97*, 1403-1413.

Strayer, D. L. & Drews, F. A. (2003). Effects of cell phone conversations on younger and older drivers. *Proceedings of the 47nd Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1860-1864).

Strayer, D. L., Drews, F. A., & Crouch, D. J. (2003). Fatal distraction? A comparison of the cell-phone driver and the drunk driver. In D. V. McGehee, J. D. Lee, & M. Rizzo (Eds.) *Driving Assessment 2003: International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design.*  Published by the Public Policy Center, University of Iowa (pp. 25-30).

Drews, F. A., Strayer, D. L., Smith, T., & Uchino, B. N. (2003). Precursors to road rage: A psychophysiological investigation. In D. V. McGehee, J. D. Lee, & M. Rizzo (Eds.) *Driving Assessment 2003: International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*. Published by the Public Policy Center, University of Iowa (pp. 194-198).

Strayer, D. L., & Drews, F. A. (2003). Simulator training improves driver efficiency: Transfer from the simulator to the real world. In D. V. McGehee, J. D. Lee, & M. Rizzo (Eds.) *Driving Assessment 2003: International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*.Published by the Public Policy Center, University of Iowa (pp. 190-193).

Drews, F. A., Syroid, N. D., Agutter, J., Westenskow, D. R., & Strayer, D. L. (2003). Increasing intraoperative patient safety: Monitoring drug concentrations. *Proceedings of the 47nd Annual Meeting of the Human Factors and Ergonomics Society (pp. 1438-1442)*.

Drews, F. A., Syroid, N. D., Agutter, J., Snell, D., Balikrishnan, S., Lingutla, S., Westenskow, D. R., & Strayer, D. L. (2003). Development and evaluation of just-in-time training to provide cardio-pulmonary resuscitation: Monitoring drug concentrations. *Proceedings of the 47nd Annual Meeting of the Human Factors and Ergonomics Society (pp. 1507-1510)*.

Strayer, D. L., Cooper, J. M., & Drews, F. A. (2004). What do drivers fail to see when conversing on a cell phone? *Proceedings of the 48nd Annual Meeting of the Human Factors and Ergonomics Society* (pp. 2213-2217).

Drews, F. A., Pasupathi, M., & Strayer, D. L. (2004). Passenger and cell-phone conversations in simulated driving. *Proceedings of the 48nd Annual Meeting of the Human Factors and Ergonomics Society* (pp. 2210-2212).

Strayer, D. L., Drews, F. A., & Burns, S. (2004). The development and evaluation of a high-fidelity simulator training program for snowplow operators (US Federal Highway Administration report #UT-04.17).

McCarley, J. S., Vais, M., Pringle, H., Kramer, A. F., Irwin, D. E., & Strayer, D. L. (2004). Conversation disrupts scanning and change detection in complex visual scenes. *Human Factors*, *46*, 424-436.

Strayer, D. L. & Drews, F. A. (2004). Profiles in driver distraction: Effects of cell phone conversations on younger and older drivers. *Human Factors*, 46, 640-649.

Lee, J. D., & Strayer, D. L. (2004). Preface to the special section on driver distraction. *Human Factors*, *46*, 583-586.

Strayer, D. L., Drews, F. A., Crouch, D. J., & Johnston, W. A. (2005). Why do cell phone conversations interfere with driving? In W. R. Walker and D. Herrmann (Eds.), *Cognitive Technology: Essays on the Transformation of Thought and Society*. McFarland & Company Inc., Jefferson, NC. (pp. 51-68).

Strayer, D. L., Drews, F. A., & Burns, S. (2005). The development and evaluation of a high-fidelity simulator training program for snowplow operators. In D. V. McGehee, J. D. Lee, & M. Rizzo (Eds.) *Driving Assessment 2005: International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design*.Published by the Public Policy Center, University of Iowa (pp. 456-462).

Drews, F. A., Syroid, N., Agutter, J., Strayer, D. L., & Westenskow, D. R. (2006). Drug delivery as a control task: Improving patient safety in anesthesia. *Human Factors*, *48*, 85-94.

Strayer, D. L., Drews, F. A., & Crouch, D. J. (2006). Comparing the cell-phone driver and the drunk driver. *Human Factors*, *48,* 381-391.

Strayer, D. L., Martinez, M., Cooper, J. M., & Drews, F. A. (2006). Brain waves suppressed by cell phone conversations.In the *Proceedings of the 50th Annual Meeting of the Human Factors and Ergonomics Society* (pp. 2364-2367).

Possin, K. L., Cagigas, X. E., Strayer, D. L., & Filoteo, J. V. (2006). Lack of impairment in patients with Parkinson’s Disease on an object-based negative priming task. *Perceptual and Motor Skills*, *102*, 219-230.

Strayer, D. L. & Drews, F. A. (2007). Multi-tasking in the automobile. In A. Kramer, D. Wiegmann & A. Kirlik (Eds.) *Applied Attention: From Theory to Practice.* (pp. 121-133)*.* Oxford University Press.

Strayer, D. L., & Drews, F. A. (2007). Attention. In F. Durso, R. Nickerson, S. Dumais, S. Lewandowsky and T. Perfect (Eds.), *Handbook of Applied Cognition, Second Edition* (pp. 29-54). John Wiley & Sons, Ltd., West Sussex, UK.

Strayer, D. L. & Cooper, J. M. (2007). Aging and skill acquisition. In J. E. Birren (Ed.) *Encyclopedia of Gerontology: Age, Aging, and the Aged*, Academic Press, Orlando FL (pp. 490-495).

Drews, D. A., Picciano, P., Agutter, J., Syroid, N., Westenskow, D. R., & Strayer, D. L. (2007). Development and evaluation of a just-in-time support system. *Human Factors*, *49*, 543-551.

Strayer, D. L., & Drews, F. A. (2007). Cell-phone induced inattention blindness. *Current Directions in Psychological Science*, *16*, 128-131.

Cooper, J. M., & Strayer, D. L. (2007). Driving impairments from concurrent cell-phone use do not diminish with practice. *Proceedings of the 51st Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1536-1539).

Miller, A. E., Strayer, D. L., & Marble, J. L. (2007). Neurotechnology for imagery analysis. *Proceedings of the 51st Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1363-1367).

Drews, F. A., Pasupathi, M., & Strayer, D. L. (2008). Passenger and cell-phone conversation during simulated driving. *Journal of Experimental Psychology: Applied*, *14*, 392-400.

Cooper, J. M., & Strayer, D. L. (2008). Effects of simulator practiced and real-world experience on cell-phone related driver distraction. *Human Factors*, *50*, 893-902.

Johnson, K. B., Syroid, N. D., Drews, F. A., Ogden, L. L., Strayer, D. L., Pace, N. L., Tyler, D. L, White, J. L., & Westenskow, D. R. (2008). Part task and variable priority training in first year anesthesia resident evaluation: A combined didactic and simulation based approach to improve management of adverse airway and respiratory events. *Anesthesiology*, *108*, 831-840.

Grier, R., Wickens, C., D., Kaber, D., Strayer, D. L., Boehm-Davis, D., Trafton, G. J., & St John, M. (2008). The red-line of workload: Theory, research, and design. *Proceedings of the 52nd Annual Meeting of the Human Factors and Ergonomics Society* (pp. 1204-1208).

Strayer, D. L., Cooper, J. M., & Drews, F. A. (2009). Profiles in cell-phone induced driver distraction. In D. Fisher, J. Lee, J. Caird, & M. Rizzo (Eds.) *Handbook of Driving Simulation for Engineering, Medicine, and Psychology (Chapter 27)*. CRC Press.

Drews, F. A., & Strayer, D. L. (2009). Cellular phones and driver distraction. In M.A. Regan, J. D. Lee, & K.L. Young (Eds.) *Driver Distraction: Theory, Effects, and Mitigation (pp. 169-190)*. John Wiley & Sons, Ltd. West Sussex, UK.

Cooper, J. M., Vladisavljevic, I., Medeiros-Ward, N., Martin, P. T., & Strayer, D. L. (2009). Near the tipping point of traffic stability: An investigation of driving while conversing on a cell phone in simulated highway traffic of varying densities. *Human Factors, 51*, 261- 268.

Drews, F. A., Yazdani, H., Godfrey, C., Cooper, J. M., & Strayer, D. L. (2009). Text messaging during simulated driving. *Human Factors*, *51*, 762-770.

Strayer, D. L. & Cooper, J. M. (2010). Cell phones and driver distraction. In B. Goldstein (Ed.) *The SAGE Encyclopedia of Perception.*

Watson, J. M., & Strayer, D. L. (2010). Supertaskers: Profiles in extraordinary multi-tasking ability. *Psychonomic Bulletin and Review*. *17*, 479-485.

Medeiros-Ward, N., Cooper, J. M., Doxon, A. J., Strayer, D. L., & Provancher, W. R. (2010). Bypassing the bottleneck: The advantage of fingertip shear feedback for navigational cues. Proceedings of the 54th Annual Meeting of the Human Factors and Ergonomics Society (pp. 2042-2047).

Logan, G. D., Miller, A. E., & Strayer, D. L. (2011). Electrophysiological evidence for parallel response selection in skilled typists. *Psychological Science, 22*, 54-56.

Strayer, D. L., Watson, J. M., & Drews, F. A. (2011). Cognitive distraction while multitasking in the automobile. In B. Ross (Ed.), *The Psychology of Learning and Motivation, Vol. 54*, 29-58.

Watson, J. M., Miller, A. E., Lambert, A., & Strayer, D. L. (2011). The magical letters P, F, C, and sometimes U: The rise and fall of executive attention with the development of prefrontal cortex. In K. Fingerman, C. Berg, T. Antonucci, & J. Smith (Eds.), *Handbook of Lifespan Psychology* (pp. 407-436), Springer.

Seegmiller, J. K., Watson, J. M., & Strayer, D. L. (2011). Individual Differences in Susceptibility to Inattentional Blindness. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 37,* 785-791.

Medeiros-Ward, N. & Strayer, D. L. (2011). On the costs of in-vehicle assessment of alcohol consumption. *Proceedings of the 55th Annual Meeting of the Human Factors and Ergonomics Society*, *55*, 1760-1764.

Miller, A. E., Watson, J. M., & Strayer, D. L. (2012). Individual differences in working memory capacity predict action monitoring and the error-related negativity. *Journal of Experimental Psychology: Learning, Memory, and Cognition, 38,* 757-763.

Strayer, D. L., & Watson, J. M. (2012). Supertaskers and the multitasking brain. *Scientific American Mind, 23*, 22-29.

Atchley, R, Strayer, D. L., & Atchley, P. (2012). Creativity in the wild: Improving creative reasoning through emersion in natural settings. *PLOS ONE, 7 (12), 1-3 (e51474)*.

Strayer, D. L., Drews, F. A., & Johnston, W. A. (2012). The eye of the beholder: Cellular communication causes inattention blindness behind the wheel. In Gale, A. G., Taylor, S. P., & Castro, C. (Eds.), *Vision in Vehicles X*. Elsevier (pp. 142-148).

Drews, F., A., Strayer, D. L., Uchino, B., & Smith, T. W. (2012). The road to road rage. In Gale, A. G., Taylor, S. P., & Castro, C. (Eds.), *Vision in Vehicles X*. Elsevier (pp. 346-352).

Watson, J. M., Lambert, A. E., Cooper, J. M., Boyle, I. V., & Strayer, D. L. (2013). On attentional control and the aging driver, in M. Garner, R. Zheng, & R. Hill (Eds.) *Engaging Older Adults with Modern Technology: Internet Use and Information Access Needs*. IGI Global Publishing, Hershey, PA (pp. 20-32).

Strayer, D. L., Medeiros-Ward, N., & Cooper, J. M. (2013). Multi-tasking and human performance. In H. Pashler (Ed.) *The SAGE Encyclopedia of Mind, Vol. 2 (pp. xx-xx).*

Sanbonmatsu, D. M., Strayer, D. L, Medeiros-Ward, H., & and Watson, J. M. (2013). Who multi-tasks and why? Multi-tasking ability, perceived multi-tasking ability, impulsivity, and sensation seeking. *PLOS ONE, 8 (1), 1-8 (e54402)*.

Strayer, D. L., Medeiros-Ward, N., & Watson, J. M. (2013). Gender invariance in multitasking: A comment on Mantyla (2013). *Psychological Science, 24,* 809-810.

Cooper, J. M., Medeiros-Ward, N., & Strayer, D. L. (2013). The impact of eye movements and cognitive workload on lateral position variability in driving. *Human Factors, 55,* 1001-1014.

Strayer, D. L., Cooper, J. M., Turrill, J., Coleman, J., Medeiros-Ward, N., & Biondi, F. (2013). Measuring cognitive distraction in the automobile. *AAA Foundation for Traffic Safety.*

Kupfer, D. M., White, V. L., Strayer, D. L., Crouch, D. J., & Burian, D. (2013). Microarray characterization of gene expression in blood during acute ethanol exposure. *BMC Medical Genomics, 6*, 1-16. doi:10.1186/1755-8794-6-26.

Regan, M. A., & Strayer, D. L. (2014). Towards an understanding of driver inattention: taxonomy and theory. *Annals of Advances in Automotive Medicine, 58*, 5-13.

Fisher, D. L., & Strayer, D. L. (2014). Modeling situation awareness and crash risk. *Annals of Advances in Automotive Medicine, 5, 33-39*.

Bergen, B., Medeiros-Ward, N., Wheeler, K., Drews, F., & Strayer, D. L. (2014). The crosstalk hypothesis: Language interferes with driving because of modality-specific mental simulation. *Journal of Experimental Psychology: General, 142*, 119-130.

Medeiros-Ward, N., Cooper, J. M., & Strayer, D. L. (2014). Hierarchical control and driving. *Journal of Experimental Psychology: General, 143,* 953-958*.*

Ratcliff, R., & Strayer, D. L. (2014). Modeling simulated driving with a one-boundary diffusion model. *Psychonomic Bulletin and Review, 21*, 577-589.

Heathcote, A., Eidels, A., Houpt, J., Coleman, J., Watson, J., & Strayer, D. L. (2014). Multi-tasking in working memory. *Proceedings of the 32nd Annual Conference of the Cognitive Science Society,* Austin TX.

Strayer, D. L., Turrill, J., Coleman, J., Ortiz, E., & Cooper, J. M. (2014). Measuring Cognitive Distraction in the Automobile: II. Assessing In-vehicle Voice-based Interactive Technologies. *AAA Foundation for Traffic Safety.*

Copper, J. M., Ingebretsen, H., & Strayer, D. L. (2014). Measuring Cognitive Distraction in the Automobile IIa: Mental Demands of Voice-Based Vehicle Interactions with OEM Systems. *AAA Foundation for Traffic Safety.*

Medeiros-Ward, N., Watson, J. M., & Strayer, D. L. (2015). On supertaskers and the neural basis of extraordinary multitasking. *Psychonomic Bulletin & Review, 22,* 876-883.

Biondi, F., Turrill, J. M., Coleman, J. R., Cooper, J. M., & Strayer, D. L. (2015). Cognitive distraction impairs driver’s anticipatory glances: An on-road study. In D. V. McGehee, J. D. Lee, & M. Rizzo (Eds.) *Driving Assessment 2015: International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design (pp. 23-29). Published by the Public Policy Center, University of Iowa.*

Heathcote, A., Coleman, J., Eidels, A., Watson, J., Houpt, J., & Strayer D. L. (2015). Working memory’s workload capacity. *Memory and Cognition, 43*, 973-989.

Coleman, J. R., Turrill, J. M., Hopman, R. J., Cooper, J. M., & Strayer, D. L. (2015). Assessing cognitive distraction using event-related potentials. In D. V. McGehee, J. D. Lee, & M. Rizzo (Eds.) *Driving Assessment 2015: International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design (pp. 296-301). Published by the Public Policy Center, University of Iowa.*

Cooper, J. M., Ingebreston, H., & Strayer, D. L. (2015). Mental workload of voice interactions with six real-world driver interfaces. In D. V. McGehee, J. D. Lee, & M. Rizzo (Eds.) *Driving Assessment 2015: International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design (pp. 1-8). Published by the Public Policy Center, University of Iowa.*

Strayer, D. L., Cooper, J. M., Turrill, J. M., Coleman, J. R., & Hopman, R. J. (2015). The smartphone and the driver’s cognitive workload: A comparison of Apple, Google, and Microsoft’s intelligent personal assistants. *AAA Foundation for Traffic Safety.*

Strayer, D. L., Cooper, J. M., Turrill, J. M., Coleman, J. R., & Hopman, R. J. (2015). Measuring cognitive distraction in the automobile III: A comparison of 10 2015 In-vehicle information systems. *AAA Foundation for Traffic Safety.*

Strayer, D. L., (2015). Is the technology in your car driving you to distraction? *Policy Insights from Behavioral and Brain Sciences, 2*, 156-165*.*

Strayer, D. L., Turrill, J., Cooper, J. M., Coleman, J., Medeiros-Ward, N., & Biondi, F. (2015). Assessing cognitive distraction in the automobile. *Human Factors, 53*, 1300-1324*.[[1]](#footnote-1)*

Strayer, D. L., & Cooper, J. M. (2015). Driven to Distraction. *Human Factors, 57*, 1343-1347.

Strayer, D. L. (2015). Attention and Driving. In J. Fawcett, E. F. Risko, & A. Kingstone (Eds.) *The Handbook of Attention*, pp. 423-442, MIT Press.

Strayer, D. L., & Fisher, D. L. (2016). SPIDER: A Model of Driver Distraction and Situation Awareness*. Human Factors, 58, 5-12.*

Lambert, A. E., Watson, J. M., Stefanucci, J. K., Medeiros-Ward, N., Bakdash, J. Z., & Strayer, D. L. (2016). Stereotype threat impairs older adult driving. *Applied Cognitive Psychology, 30*, 22-28.

Sanbonmatsu, D. M., Strayer, D. L., Behrends, A. A., Ward, N., & Watson, J. M. (2016). Why drivers use cell phones and why they support legislation to restrict this practice? *Accident Analysis & Prevention*, *92*, 22-33.

Sanbonmatsu, D. M., Strayer, D. L., Biondi, F., Behrends, A. A., & Moore, S. M. (2016). Cell phone use diminishes self-awareness of impaired driving. *Psychonomic Bulletin & Review, 23*, 617-623.

Cooper, J. M., Castro, S. C., & Strayer, D. L. (2016). Extending the detection response task to simultaneously measure cognitive and visual task demands. *Proceedings of the 60th Annual Meeting of the Human Factors and Ergonomics Society*, *60,* 1955-1959.

Castro, S. C., Copper, J. M., & Strayer, D. L. (2016). Validating two assessment strategies for visual and cognitive load in a simulated driving task. *Proceedings of the 60th Annual Meeting of the Human Factors and Ergonomics Society*, *60,* 1892-1896.

Coleman, J. R., Turrill, J., Cooper, J. M., & Strayer, D. L. (2016). Cognitive workload using interactive voice-messaging systems. *Proceedings of the 60th Annual Meeting of the Human Factors and Ergonomics Society*, *60,* 1887-1891.

Turrill, J., Coleman, J. R., Cooper, J. M., & Strayer, D. L. (2016). The residual costs of multitasking: Causing trouble down the road. *Proceedings of the 60th Annual Meeting of the Human Factors and Ergonomics Society*, *60,* 1960-1963.

Reimer, B., Angell, L., Strayer, D. L., Tijerina, L., & Mehler, B. (2016). Evaluating demands associated with the use of voice-based in-vehicle interfaces. *Proceedings of the 60th Annual Meeting of the Human Factors and Ergonomics Society*, *60,* 2076-2080.

Gardner, M. K., & Strayer, D. L. (2016). What cognitive psychology can tell us about educational computer games? In R. Zheng, M. K. Gardner (Eds.) *Serious Games for Educational Application*, (pp. 1-19), IGI Global, Hershey, PA.

Strayer, D. L. (2016). Aging and Driving. In C. Hertzog (Ed.) *The Encyclopedia of Geropsychology* (pp. 1-9), SpringerMeteor. [doi: 10.1007/978-981-287-080-3\_213-1](http://link.springer.com/referenceworkentry/10.1007/978-981-287-080-3_213-1)

Strayer, D. L., Cooper, J. M., Turrill, J., Coleman, J. R., & Hopman, R. J. (2016). Talking to your car can drive you to distraction. *Cognitive Research: Principles & Implications, 1, 1-16*. doi: 10.1186/s41235-016-0018-3

Biondi, F., Coleman, J. R., Cooper, J. M., & Strayer, D. L. (2016). Average heart rate for driver monitoring systems. *International Journal of Human factors and Ergonomics, 4*, 282-291.

Watson, J. M., Memmott, M. G., Moffitt, C. C., Coleman, J. R., Turrill, J. M., Fernández, Á., & Strayer, D. L. (2016). On working memory and a productivity illusion in distracted driving. *Journal of Applied Research in Memory and Cognition, 5*, 455-453.

Coleman, J. R., Watson, J. M., & Strayer, D. L. (2017). Working memory capacity and task goals modulate error-related ERPs. *Psychophysiology, 54*, 1-14. https://doi.org/ 10.1111/psyp.12805

Atchley, P., & Strayer, D. L. (2017). Small screen use and driving safety. *Pediatrics, 140*, (Supplement 2) S107-S111; DOI: 10.1542/peds.2016-1758M

Strayer, D. L. (2017). Teen drivers and deadly digital distractions: Prevention and policies (pp. 177-188). In Kimberly Young and Cristanio Nabuco de Abreu (Eds.) *Internet Addiction in Children and Adolescents: Risk Factors, Treatment, and Prevention*, Springer Publishing Company, New York, NY.

Uncapher, M. R., Lin, L., Rosen, L. D., Kirkorian, H. L., Baron, N. S., Bailey, K., Cantor, J., Strayer, D. L., Anderson, D. R., Parsons, T. D., & Wagner, A. D. (2017). Media multitasking and cognitive, psychological, neural, and learning differences. *Pediatrics, 140*, (Supplement 2) S62-S66; DOI: 10.1542/peds.2016-1758D

Strayer, D. L., Biondi, F., & Cooper, J. M. (2017). Dynamic workload fluctuations in driver/non-driver conversational dyads. In D. V. McGehee, J. D. Lee, & M. Rizzo (Eds.) *Driving Assessment 2017: International Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design (pp. 362-367). Published by the Public Policy Center, University of Iowa.*

Biondi, F., Strayer, D. L., Rossi, R., Gastaldi, M., & Mulatti, C. (2017). Advanced driver assistance systems: Multimodal, redundant warnings to enhance road safety. *Journal of Applied Ergonomics, 58*, 238-244.

Strayer, D. L., Cooper, J. M., Turrill, J., Coleman, J. R., & Hopman, R. J. (2017). Smartphones and driver’s cognitive workload: A comparison of Apple, Google, and Microsoft’s intelligent personal assistants. *Canadian Journal of Experimental Psychology, 71*, 93-110.

Strayer. D. L., Cooper, J. M., Goethe, R. M., McCarty, M. M., Getty, D., & Biondi, F. (2017). Visual and cognitive demands of using in-vehicle information systems. *AAA Foundation for Traffic Safety.[[2]](#footnote-2)*

Tillman, G., Strayer, D. L., Eidels, A., & Heathcote, A. (2017). Modeling cognitive load effects between a passenger and driver. *Attention, Perception and Psychophysics, 79*, 1759-1803.

Strayer, D. L., Medeiros-Ward, N., & Watson, J. M. (2017). Cognitive distraction and its neural basis. In M. Regan, & T. Victor (Eds.) M. Regan, & T. Victor (Eds.) *Driver Distraction*, pp. 1795-1803, Ashgate Publishers, pp. 1795-1803, Ashgate Publishers.

Sanbonmatsu, D. M., Strayer, D. L., Biondi, F., & Yu, A. (2018). Cognitive underpinnings of beliefs and confidence in beliefs about fully automated vehicles. *Transportation Research Part F: Psychology and Behavior, 55,* 114-122.

Biondi, F., Getty, D. D., McCarthy, M. M., Goethe, R., M., Cooper, J. M., & Strayer. D. L. (2018). The challenge of ADAS assessment: A scale for the assessment of the Human-Machine Interface of advanced driver assistance technology*. Transportation Research Record (TRR), A Journal of the Transportation Research Board, xx, 1-10. doi/10.1177/0361198118773569*

Getty, D. D., Biondi, F., Morgan, S., Cooper, J. M., & Strayer. D. L. (2018). The effects of voice system design components on driver workload. *Transportation Research Record (TRR), A Journal of the Transportation Research Board, xx, 1-7. doi/10.1177/0361198118777382.*

Wheatley, C. L., Esplin, J., Loveless, S. M., Cooper, J. M., Biondi, F., & Strayer, D. L. (2018). Performance and workload trends: The effects of repeated exposure to “High” demand tasks. *Proceedings of the 62th Annual Meeting of the Human Factors and Ergonomics Society*, *62,* 6-10.

Motzkus, C. J., Getty, D. J., Campos, A., Cooper, J. M., & Strayer, D. L. (2018). Reevaluating the DRT for concurrent measures of cognitive and visual demand. *Proceedings of the 62th Annual Meeting of the Human Factors and Ergonomics Society*, *62,* 1-5.

Biondi, F., Lohani, M., Hopman, R. J., Mills, S., Cooper, J. M., & Strayer, D. L. (2018). 80 MPH and out of the loop: Effects of real-world semi-automated driving on driver workload and arousal. *Proceedings of the 62th Annual Meeting of the Human Factors and Ergonomics Society*, *62,* 1878-1882.

Strayer, D. L., Cooper, J. M., McCarthy, M. M., Getty, D. J., Wheatley, C. L., Campos, A., Motzkus, C., McKenzie, K., Loveless, S. M., Esplin, J., Goethe, R. M., & Biondi, F. (2018). Visual and cognitive demands of using Apple’s CarPlay, Google’s Android Auto, and five different OEM infotainment systems. *AAA Foundation for Traffic Safety.*

Kaufman, E. A., Crowell, S. E., Coleman, J. M., Puzia, M. E., Baucom, B. R., & Strayer, D. L. (2018). Electroencephalographic and cardiovascular biomarkers of vulnerability within families of suicidal adolescents. *Biological Psychology*, *136*, 46-56. doi.org/10.1016/j.biopsycho.2018.05.007

Strayer, D. L., Cooper, J. M., McCarthy, M. M., Getty, D. J., Wheatley, C. L., Motzkus, C., Goethe, R. M., Biondi, F., & Horrey, W. (2019). Visual and cognitive demands of using CarPlay, Android Auto, and five native infotainment systems. *Human Factors, 65*, 1371-1386. doi.org/10.1177/0018720819836575.

Castro, S. C., Strayer, D. L., Matzke, D., & Heathcote, A. (2019). Cognitive workload measurement and modeling under divided attention. *Journal of Experimental Psychology: Human Perception and Performance, 45* 826-829.

Lohani, M., Payne, B. R., & Strayer, D. L. (2019). A review of psychophysiological measures to sense and assess cognition and performance in driving research. *Frontiers of Human Neuroscience, 13(57),* 1-27. doi.org/10.3389/fnhum.2019.00057

Cooper, J. M., Wheatley, C. L., McCarty, M. M., Motzkus, C. J., Lopes, C. L., Erikson, G. G., Baucom, R. W. B., & Strayer, D. L. (2019). Age-related differences in the cognitive, visual and temporal demands of in-vehicle information systems. *AAA Foundation for Traffic Safety.*

Strayer. D. L., Cooper, J. M., Goethe, R. M., McCarty, M. M., Getty, D., & Biondi, F. (2019). Assessing the visual and cognitive demands of using in-vehicle information systems*. Cognitive Research: Principles & Implication ,*4:18 (https://doi.org/10.1186/s31235-019-0166-3).

Palada, H., Neal, A., Strayer, D. L., Ballard, T., & Heathcote, A. (2019). Using response time modeling to understand the sources of dual-task interference in a dynamic environment. *Journal of Experimental Psychology: Human Perception and Performance, 45*, 1331-1345.

Biondi, F., Getty, D., Cooper, J., & Strayer, D. L. (2019). Examining the effects of infotainment auditory-vocal systems’ design components on workload and usability. *Journal of Transportation Research Part F: Psychology and Behavior, 62,* 520-528*.*

LoTemplio, S. B., Scott, E. E., Hopman, R. J., McDonnell, A. S., McKinney, T. L., Payne, B. R., Strayer, D. L. (2019). Nature as a potential modulator of the error-related negativity: Registered Report. Phase I Acceptance. *International Journal of Psychophysiology.*

Lopes, C. L., Erickson, G. G., Cooper, J. M., Wheatley, C. L., & Strayer, D. L. (2019). Driven to comment: Learning from older drivers’ impressions of in-vehicle technologies. *Proceedings of the 63rd Annual Meeting of the Human Factors and Ergonomics Society*, 63, 22-26. https://doi.org/10.1177/1071181319631134.

Hopman, R., Atchley, R. A., Atchley, P., & Strayer, D. L. (2020). How Nature Helps Replenish Our Depleted Cognitive Reserves and Improves Mood by Increasing Activation of the Brain’s Default Mode Network. In S. Lane and P. Atchley (Eds). *Human Capacity in the Attention Economy*, pp. 159-187. APA Press.

Strayer, D. L., Cooper. J. M., Sanbonmatsu, D. M., Eriksen, G. G., Simmons, T. T., McDonnell, A. S., Carriero, A. E., Crabtree, K. W., & Lohoni, M. (2020). Driver’s arousal and workload under partial vehicle automation, *AAA Foundation for Traffic Safety.*

Cooper, J. M., Wheatley, C. L., McCarty, M. M., Motzkus, C. J., Lopes, C. L., Erickson, G. C., Baucom, B.W. R., Horrey, W. J., & Strayer, D. L. (2020). Age-related differences in the cognitive, visual, and temporal demands of in-vehicle information systems. F*rontiers in Psychology: Human-Media Interaction*, *11*, 1154. doi: 10.3389/fpsyg.2020.01154.

Strayer, D. L., Getty, D., Biondi, F., & Cooper, J. S. (2020). The multitasking motorist and the attention economy. In S. Lane and P. Atchley (Eds). *Human Capacity in the Attention Economy*, pp. 135-156. APA Press.

Lohani, M, Cooper. J. M., Sanbonmatsu, D. M., Eriksen, G. G., Simmons, T. T., McDonnell, A. S., Carriero, A. E., Crabtree, K. W., & Strayer, D. L. (2020). Driver arousal and workload under partial vehicle automation: A pilot study. *Proceedings of the 63rd Annual Meeting of the Human Factors and Ergonomics Society*, *xx,* xxx-xxx.

LoTemplio, S. B., Scott, E. E., McDonnell, A. S., Hopman, R. J., Castro, S. C., McNay, G. D., McKinney, T. L., Greenberg, K., Payne, B. R., Strayer, D. L. (2020). Nature as a potential modulator of the error-related negativity: A Registered Report. *International Journal of Psychophysiology, 156,* 49-59*.*

Scott, E. E., LoTemplio, S. B., McDonnell, A. S., McNay, G. D., Greenberg, K., McKinney, T., Uchino, B. N., & Strayer, D. L. (2020). The autonomic nervous system in its natural environment: Immersion in nature is associated with changes in heart rate and heart rate variability. *Psychophysiology, xx*, 1-14. https://doi.org/10.1111/psup.13698

Hopman, R. J., LoTemplio, S. B., Scott, E. E., McKinney, T. L., & Strayer, D. L. (In Press). Resting-state Posterior Alpha Changes with Prolonged Exposure in a Natural Environment. *Cognitive Research: Principles & Implication, x*x, xx-xx.

Strayer, D. L., Castro, S. C., & McDonnell, A. S. (In Press). The multitasking motorist. In A. Kiesel, L. Johannsen, H. Müller, & I. Hoch (Eds.) *The Handbook of Human Multitasking*, Springer.

Scott, E. E., McDonnell, A. S., LoTemplio, S. B., Uchino, B. N., & Strayer, D.L. (2021). Towards a unified model of stress recovery and cognitive restoration in nature. *Parks Stewardship Forum, 37*, 46-60.

Hopman, R. J., Weissinger, K., McKinney, T., MacNamee, K. F., Watson, J. M., & Strayer, D. L. (Under Review). Electrophysiological Measures of Cognition in Nature: The Influence of Technology on Cognitive Restoration.

Coleman, L. R., LoTemplio, S., & Strayer, D. L. (Under Review). How sweet it is: An electrophysiological assessment of the role glucose and fatigue play in the regulation of errant behavior.

Udo, B., Matzke, D., Gretton, M., Castro, S. C., Cooper, J. M., Skinner, M., Strayer, D. L., Heathcote, A. (Under Review). Real-time prediction of short time scale fluctuations in cognitive workload.

Wheatley, C. L., Crabtree, K. W., Wise, A. T., Motzkus, C. J., Castro, S. C., Cooper, J. M., & Strayer, D. L. (Under Review). The auditory N-back task: An unstable standard?

McDonnell, A. S., LoTemplio, S. B., Scott, E. E., Greenberg, K., McNay, G. D., Castro, S. C., & Strayer, D. L. (Under Review). Nature modulates neurophysiological correlates of reward.

Scott, E. E., McDonnell, A. S., LoTemplio, S. B., McNay, G. D., Greenberg, K., Castro, S. C., & Strayer, D. L. (Under Review). Prolonged immersion in nature modulates neural correlates of working memory.

Turrill, J., Castro, S. C., Cooper, J. M., & Strayer, D. L. (Under Review). The persistence of distraction: The hidden costs of intermittent multitasking.

McDonnell, A. S., Simmons, T. G., Erikson, G. G., Lohani, M., Cooper, J. M., & Strayer, D. L. (Under Review). This is your brain on autopilot: Neural indices of driver workload and engagement during partial vehicle automation.

Lohani, M., Cooper, J. M., Erikson, G. G., Simmons, T. G., McDonnell, A. S., Carriero, A. E., Crabtree, K. W., Strayer, D. L. (Under Review). Heart rate variability reveals no difference in arousal and cognitive demands between manual and partially automated driving.

DeCouto, B. S., Williams, A. M., Lohse, K. R., Creem-Regehr, S. H., Strayer, D. L., & Fino, P. C. (Under Review). Postural regulation during a video game task under competitively induced anxiety.

Damaso, K. A., Castro, S. C., Todd, J., Strayer, D. L., Provost, A., Matzke, D., & Heathcote, A. J. (Under Review). Driven to distraction: Not omitting the omissions.

Invited Published Commentaries

Strayer, D. L., Drews, F. Albert, R. & Johnston, W. (2001). Does cell phone conversation impair driving performance? *National Safety Council Official Newsletter of the Consortium for Injury and Disability Research (August/September issue) pp. 1-2.*

Strayer, D. L., & Johnston, W. *A.* (2001). Should individuals be able to conduct business on the phone while driving? Invited commentary for *Utah Business Magazine*.

Strayer, D. L., Drews, F., & Johnston, W. (2003). Inattention blindness behind the wheel. *National Safety Council Official Newsletter of the Consortium for Injury and Disability Research (February/March issue) pp. 1-7.*

Strayer, D. L., Drews, F. A., & Johnston, W. A. (2003). Are we being driven to distraction? In the University of Utah Center for Public Policy and Analysis’ *Public Policy Perspective, 16, 1-2*

Strayer, D. L. (2012). Action through Advocacy, *Ergonomics in Design, 19*, 23-24.

Strayer, D. L. (2018). Behind the Wheel at Work. Q&A feature on driver distraction and workplace safety for the March 2018 newsletter to the National Institute for Occupational Safety and Health (NIOSH) Center for Motor Vehicle Safety.

Conference Abstracts

Williams, W. C., Parsons, R. L., & Strayer, D. L. (1980). Classical discrimination conditioning using the solutions to verbal and spatial problems as CSs: Bilateral measures of electrodermal excitation and inhibition. *Psychophysiology*, *18*, 148.

Blackwood, P. J., Williams, W. C., Strayer, D. L., & Stowell, M. M. (1982). Amnesia for CS‑UCS relationships during hypnosis: Effects on SCR discrimination performance. *Psychophysiology*, *19*, 307.

Strayer, D. L., & Macias, A. M. (1982). WAVE: A FORTRAN IV algorithm for analyzing skin conductance response data. *Psychophysiology*, *19*, 590.

Strayer, D. L., Karis, D., Coles, M. G. H., & Donchin, E. (1984). P300 latency and reaction time are dissociated in a Sternberg task. *Psychophysiology*, *21*, 600.

Mane, A. M., Coles, M. G. H., Karis, D., Strayer, D. L., and Donchin, E. (1984). The design and use of subtasks in part training and their relationship to the whole task. *Proceedings of the 20th Annual Conference on Manual Control*.

Strayer, D. L., Wickens, C. D., & Braune, R. (1985). Mental chronometry and aging: An additive factors/psychophysiological approach. *Psychophysiology*, *22*, 615.

Strayer, D. L., & Kramer, A. F. (1986). Psychophysiological indices of automaticity and attentional resources. *Psychophysiology*, *23*, 466.

Strayer, D. L., Coles, M. G. H., Buckley, J., & Donchin, E. (1986). Stimulus repetition effects: Evidence for processes in cascade. *Psychophysiology*, *23*, 466.

Kramer, A. F., & Strayer, D. L. (1987). P300 operating characteristics: Performance/ERP analysis of dual‑task demands and automaticity. *Proceedings of the 4th International Conference of Neurosciences*, Paris‑Dourdan, France.

Kramer, A. F., Strayer, D. L., & Liu, Y. (1988). The role of consistency in the development of automatic processing. *Proceedings of the 11th Psychology in the Department of Defense Symposium*, pp. 266‑270, Colorado Springs, CO.

Strayer, D. L., Gehring, W. J., Kramer, A. F., & Miller, G. A. (1988). Adult age differences in the development of automaticity: A psychophysiological assessment. *Proceedings of the 11th Psychology in the Department of Defense Symposium*, pp. 271‑275, Colorado Springs, CO.

Buckley, J., Kramer, A. F., & Strayer, D. L. (1988). Component task consistency and automatic processing. *Psychophysiology*, *25*, 437‑438.

Strayer, D. L., Buckley, J., & Kramer, A. F. (1988). The role of the response criterion in automatic processing. *Psychophysiology*, *25*, 484‑485.

Mecklinger, A., Kramer, A. F., & Strayer, D. L. (1990). Memory search processes: An analysis of event‑related brain potentials and EEG components. *Psychophysiology*, *27*, S51.

Strayer, D. L. (1992). The power law of attention capture. *Proceedings of the 33rd Annual Meeting of the Psychonomics Society*, p. 31.

Kramer, A. F., Humphrey, D., Larish, J., Strayer, D. L., Logan, G. D., Pringle, H. (1992). Aging and inhibitory control. *Paper presented at the 4th Cognitive Aging Conference*, Atlanta, GA.

Malley, G. B., & Strayer, D. L. (1993). The time course of automatic and non‑automatic information processing. *Proceedings of the 34th Annual Meeting of the Psychonomics Society*, p. 43.

Humphrey, D. G., Kramer, A. F., & Strayer, D. L. (1994). Negative priming and aging: The effects of pacing and the number of distractors. *Paper presented at the 6th Cognitive Aging Conference,* Atlanta, GA.

Strayer, D. L. (1995). Negative priming and stimulus repetition. *Proceedings of the 36th Annual Meeting of the Psychonomics Society*.

Prenovitz, M., Friedrich, F. J., & Strayer, D. L. (1996). ERP evidence of automatic lexical activation. *Paper presented at the Cognitive Neurosciences Meeting*, San Francisco, CA.

Vecera, S. P., Strayer, D. L., & Chamberlain, S. (1996). ERP indices of object-based visual attention. *Proceedings of the 37th Annual Meeting of the Psychonomics Society*, *1*, 27.

Strayer, D. L., & Grison, S. (1997). Towards an activation model of negative priming. *Proceedings of the 38th Annual Meeting of the Psychonomics Society*, *2*, 69.

Friedrich, F. J., Strayer, D. L., & Christensen, S. M. (1997). ERP evidence of prime task effects on semantic priming. *Proceedings of the 38th Annual Meeting of the Psychonomics Society*, *2,* 7.

Strayer, D. L., & Grison, S. (1998). Converging evidence for the locus of inhibition in negative identity priming. *Paper presented at the 8th Annual Meeting of Brain, Behavior, and Cognitive Science*, Ottawa, Canada.

Grison, S., & Strayer, D. L. (1998). ERP evidence for the locus of negative priming. *Proceedings of the 39th Annual Meeting of the Psychonomics Society*, *3*, 5.

Strayer, D. L., Johnston, W. A., & Grison, S. (1999). Driven to distraction: Dual task studies of driving and cellular phone use. *Proceedings of the 40th Annual Meeting of the Psychonomics Society*, *4*, 16.

Bermudez, J., Agutter, J., Westenskow, D., Foresti, S., Zhang Y., Gondeck‑Becker, D., Syroid, N., Lilly, B., Strayer, D., & F. Drews.(2000). Data representation architecture: Visualization design methods, theory and technology applied to anesthesiology. In M. Clayton & G. Casquez dg Velasco (Eds.). *Proceedings of ACADIA’2000.* Washington DC., pp. 91-102

Syroid, N. D., Westenskow, D. R., Agutter, A., Bermudez, J. C., Albert, R. W., Drews, F. A., & Strayer, D. L. (2001). Development and evaluation of a graphical anesthesia drug display. *Paper presented at the Society for Technology in Anesthesia*.

Agutter, J., Syroid, N. D., Drews, F., Westenskow, D. R., Bermudez, J. C., & Strayer, D. L. (2001). Anesthesia monitor usability testing protocol. *Paper presented at the Society for Technology in Anesthesia*.

Agutter, J., Syroid, N., Drews, F.A., Westenskow, D.R., Bermudez, J., and Strayer D.L., (2001). Graphic Data Display for Cardiovascular System Case Study. *Proceedings of the IEEE Symposium on Information Visualization* 2001 (INFOVIS'01).

McCarley, J. S., Vais, M., Pringle, H., Kramer, A. F., Irwin, D. E., & Strayer, D. L. (2001). Conversation disrupts visual scanning of traffic scenes*. Paper presented at Vision in Vehicles*, Australia.

Strayer, D. L., Drews, F. A., & Albert, R. A. (2001). Negative priming and perceptual facilitation. *Proceedings of the 42nd Annual Meeting of the Psychonomics Society, 6, 113.*

Strayer, D. L. (2002). Why do cell phone conversations interfere with driving? *Presented at the 81st Annual Meeting of the Transportation Research Board*, Washington, DC.

Drews, F.A., Westenskow, D.R., Syroid, N., Strayer, D.L., Albert, R., Agutter, J., Bermudez, J. (2002). Seeing is believing? Utility ratings of monitoring technologies. *Presentation at the Annual Society of Technology in Anesthesia Meeting*.

Strayer, D. L., Drews, F. A., & Johnston, W. A. (2003). Inattention-blindness behind the wheel. Paper presented at the 3rd Annual Meeting of Vision Sciences Society, Sarasota, FL.

Drews, F. A., Strayer, D. L., Uchino, B. N., & Smith, T. W. (2003). The road to road rage. *Paper presented at Vision in Vehicles*, Granada, Spain.

Strayer, D. L., Drews, F. A., & Johnston, W. A. (2004). Seeing, attending, and remembering while driving. *Proceedings of the 45th Annual Meeting of the Psychonomics Society, 9, 37.*

Albert, R., Syrod, N., Zhang, Y., Agutter, J., Drews, F., Strayer, D. Hutchinson, G., & Westenskow, D. (2004). Psychophysiological scaling of a cardiovascular information display. *Proceedings of the IEEE Symposium on Information Visualization*.

Johnston, K., Drews, F., Strayer, D., Tyler, D., Ogden, L., White, J., Malen, M., Mortensen, W., Lu, E., Larsen, J., Poulson, J., Balakrishnan, S., Lingulta, S., Syroid, N., & Westenskow, D. (2005). Introduction of a part task and variable priority training in first year anesthesia resident education: A combined didactic and simulation based approach to improve management of adverse respiratory events. *Proceedings of the International Meeting on Medical Simulation, Miami, FL.*

Syroid, N., Tyler, D., Ogden, L., White, J., Drews, F., Strayer, D., Mortenson, W., Malan, M., Lu, E., Larsen, J., Poulson, J., Balikrishnon, S., Lingutla, S., Westenskow, D., & Johnston, K. (2005). Exploration of partial task and variable priority training for anesthesia residents to improve management of adverse respiratory events: Preliminary results. *Proceedings of the International Meeting on Medical Simulation, Miami, FL.*

Strayer, D. L., & Watson, J. M. (2009).  Supertaskers:  Extraordinary ability in multi-tasking.  Proceedings of the 50th Annual Meeting of the Psychonomics Society, Boston, MA.

Miller, A. E., Watson, J. M., & Strayer, D. L. (2009).  Individual differences in cognitive control unveiled by components of the ERP.  Proceedings of the 50th Annual Meeting of the Psychonomics Society, Boston, MA.

Lambert, A. Watson, J. M., & Strayer, D. L., (2010). The roles of working memory capacity, visual attention, and age in driving performance. Proceedings of the 51st Annual Meeting of the Psychonomics Society, San Francisco, CA.

Logan, G. D., Miller, A. E., & Strayer, D. L. (2011). Electrophysiological evidence for hierarchical error detection in skilled typewriting. Proceedings of the 52nd Annual Meeting of the Psychonomics Society, Seattle, WA.

Miller, A. E., Strayer, D. L., & Logan, G. D. (2011). Electrophysiological evidence for parallel and serial processing in skilled typewriting. Proceedings of the 52nd Annual Meeting of the Psychonomics Society, Seattle, WA.

Medeiros-Ward, N., Sanbonmatsu, D. M., Watson, J. M., & Strayer, D. L. (2011). Why we multitask. Proceedings of the 52nd Annual Meeting of the Psychonomics Society, Seattle, WA.

Heathcote, A., Eidels, A., Strayer, D. L., Coleman, J. & Houpt, J. W. (2013). Capacity and redundant information in working memory. Proceedings of the 54th Annual Meeting of the Psychonomics Society, Toronto, Canada.

Watson, J. M., Miller, A. E., Moffitt, C., Strayer, D. L., & Lambert, A. E. (2013). To control or not to control: Individual differences in working memory capacity to explore automation and the resolution of the control dilemma. Proceedings of the 54th Annual Meeting of the Psychonomics Society, Toronto, Canada.

Miller. A. E., Watson, J. M., & Strayer, D. L. (2013). Stop it! Individual differences in working memory capacity predict performance in a stop-signal paradigm. Proceedings of the 54th Annual Meeting of the Psychonomics Society, Toronto, Canada.

Medeiros-Ward, N., & Strayer, D. L., (2013). Hierarchical control and driving. Proceedings of the 54th Annual Meeting of the Psychonomics Society, Toronto, Canada.

**Invited Presentations and Workshops**

Strayer, D. L., & Williams, W. C. (1981). SCORIT 1980. *Paper presented at the twenty‑first annual meeting of the Society for Psychophysiological Research, Washington, DC.*

Williams, W. C., Strayer, D. L., & Macias, A. M. (1981). A tentative comparison of four computing routines for scoring electrodermal data. *Paper presented at the twenty‑first annual meeting of the Society for Psychophysiological Research, Washington, DC.*

Invited participant in the *Seventh Annual Carmel Conference on Cognitive Psychophysiology: Magnetic and electrical event‑related brain activity as a tool in the study of cognitive function, Carmel CA (1985).*

Kramer, A. F., & Strayer, D. L. (1988). Symposium on automatic processing. *Paper presented at the 96th Annual APA Conference, Atlanta, GA.*

Strayer, D. L., & Kramer, A. F. (1989). Symposium on aging and skill acquisition. *Paper presented at the 97th Annual APA Conference, New Orleans, LA.*

Kramer, A. F., & Strayer, D. L. (1990). Symposium on automatic information processing: Theory and application. *Paper presented at the 98th Annual APA Conference, Boston, MA.*

Strayer, D. L., & Kramer, A. F. (1990). Microstrategic behavior: Strategic aspects of skilled performance. *Paper presented at the 34th Annual Human Factors Conference, Orlando, FL.*

Strayer, D. L. (1993). Primed popout and the power law of attention capture. *Paper presented at the 3rd West Coast Attention Meeting, Eugene, OR*.

Kramer, A. F., Larish, J. F., & Strayer, D. L. (1994). Training strategies for attentional control in dual‑task settings: A comparison of young and old subjects. *Paper presented at the conference on Converging Operations in the Study of Visual Selective Attention, Urbana IL.*

Schwarting, I. S., Wilson‑Leff, C., Malley, G. B., Strayer, D. L., & Johnston, W. A. (1994). ERP indices of novel popout. *Paper presented at the conference on Converging Operations in the Study of Visual Selective Attention, Urbana IL.*

Malley, G. B., & Strayer, D. L. (1994). Effects of stimulus repetition on positive and negative priming. *Paper presented at the conference on Converging Operations in the Study of Visual Selective Attention, Urbana IL.*

Strayer, D. L. (1996). Aging and skill acquisition. *Colloquium presented at Brigham Young University. December 2, 1996.*

Strayer, D. L. (1998) Converging operations in the study of negative priming. *Colloquium presented at the University of Illinois at Urbana-Champaign. June 12, 1998.*

Strayer, D. L., & Drews, F. A. (2003). Simulation of cell-phone induced driver distraction. Paper presented at the *Society for Automotive Engineering International Government/Industry Meeting*, Washington, D.C.

Strayer, D. L. (2003). Are we being driven to distraction? *Colloquium presented to General Motors Co., Detroit, MI, June 6, 2003*.

Strayer, D. L., Drews, F. A., & Johnston, W. A. (2003). Distracted while driving. Invited presentation at the conference on *Cognitive Technology: Transforming Throughout Society*, Winston-Salem State University, NC, June 14, 2003.

Strayer, D. L. (2003). Why do cell phone conversations interfere with driving? *Colloquium presented at Texas Tech University, Lubbock, TX, November 14, 2003.*

Strayer, D. L. (2003). Developing Integrated Graphical Support Systems for Anesthesiology: An Interdisciplinary Approach. *Colloquium presented at Texas Tech University, Lubbock, TX, November 14, 2003.*

Strayer, D. L. (2004). A comparison of the cell phone driver and the drunk driver. Invited presentation at the *Stanford Institute for Economic Policy Research and the AEI-Brookings Joint Center for Regulatory Studies Conference on Communications Policy*, October 9, 2004.

Strayer, D. L. (2004). Why do cell phone conversations interfere with driving? Invited presentation at Whitman College, October 19, 2004.

Strayer, D. L. (2005).  The logic of the distracted driver.  Paper presented at the Transportation Research Board workshop *Development of Standardized Descriptions of Driving Simulator Scenarios: Human Factors Considerations*.  Washington D.C., January 9, 2005.

Strayer, D. L. (2005). Multi-tasking in the automobile: Why do cell phone conversations interfere with driving? Invited keynote presentation at the Mid-South Psychology Conference. Memphis, TN, February 19, 2005.

Strayer, D. L. (2005). Multi-tasking in the automobile. Invited presentation at the 57th annual meeting of the *American Academy of Forensic Sciences*. New Orleans, LA February 22, 2005.

Strayer, D. L. (2005). Multi-tasking in the automobile: Cell phones and the distracted driver. Invited presentation at *Attention: From Theory to Practice*, a festschrift in honor of Christopher D. Wickens, Champaign, IL, June 18, 2005.

Strayer, D. L. (2005). Cell phone use and driver distraction. Invited presentation at the annual meeting of the *Governors Highway Safety Association*, Norfolk, VA, August 29, 2005.

Strayer, D. L., (2005). Teens and driver distraction. Invited presentation at the annual meeting of the *Biological Basis of Pediatric Practice Symposium “Childhood Injury: Our Largest and Most Deadly Epidemic”*, Park City, UT, September 11, 2005.

Strayer, D. L., (2005). Driven to Distraction. Invited presentation at the International Conference on Distracted Driving, Toronto, Canada, and October 2, 2005.

Strayer, D. L. & Drews, F. A. (2005). Technology and driver distraction. Invited presentation at the Utah Public Risk Managers meeting, Sandy, UT October 12, 2005.

Strayer, D. L. (2005). Cell phones: Assessing the real risks and workable strategies for safety. Invited presentation to the ORC Worldwide Executive Business Issues Forum Meeting, Chicago, IL, October,13, 2005.

Strayer, D. L. (2006). Dual-task studies of simulated driving and conversing on a cell phone. Invited colloquium in the Department of Educational Psychology, University of Utah, March 6, 2006.

Strayer, D. L. (2006). Training strategies to support performance in complex operational environments. Invited presentation to the ORC Worldwide Executive Business Issues Forum Meeting, Ft. Lauderdale, FL, April 6, 2006.

Strayer, D. L. (2006). Driver perception while conversing on a cell phone. Presentation at the American Psychological Association, August 10, 2006.

Strayer, D. L. (2006). Cell phones and driver distraction. Presentation at the American Psychological Association, August 11, 2006.

Strayer, D. L., (2006). Cell Phones and Driver Distraction. Presentation given at the Greater Avenues Community Council, Salt Lake City, UT, September 6, 2006.

Strayer, D. L. (2006). Multitasking on the Information Superhighway: Why Using a Cell Phone Makes You Drive Like You’re Drunk. Grand Rounds, University of Utah, Salt Lake City, UT, November 21, 2006.

Strayer, D. L. (2007). Cell Phones and Driver Distraction. Presented at the National Safety Council (Traffic Safety Coalition), Washington D.C., February 28, 2007.

Strayer, D. L. (2007). Multitasking on the Information Superhighway: Why Using a Cell Phone Makes You Drive Like You’re Drunk. Invited Rocky Mountain Psychological Association Battig Memorial Lecture, Denver, CO, April 13, 2007.

Strayer, D. L. (2008). The multitasking teen driver. Invited presentation at the New Mexico Department of Transportation Safety Summit, Albuquerque, NM March 12, 2008.

Strayer, D. L. (2008). Attention and dual-task control in natural settings. American Psychological Association, Boston, MA, August 17, 2008.

Strayer, D. L. (2009). The Multi-tasking Driver: Are we being driven to distraction. Invited presentation at Vanderbilt University, Nashville, TN April 1, 2009.

Strayer, D. L. (2011). Cognitive Distraction While Multitasking in the Automobile. Keynote address at the annual meeting of the Rocky Mountain Psychological Association, Salt Lake City, UT (April 14, 2011).

Strayer, D. L. (2011). Cognitive Distraction and its Neural Basis. Keynote address at the Second International Conference on Driver Distraction and Inattention, (Gothenburg, Sweden, September 6, 2011).

Strayer, D. L. (2012). Cell Phones and Other Distractions: Applied Cognitive Neuroscience Research on the Limits of Multitasking Keynote address at the National Institute for Teachers of Psychology (Ft. Lauderdale, FL, January 4, 2012).

Strayer, D. L. (2012). Who Multitasks and Why? Invited participant at the National Academies Keck Futures Initiative (NAKFI) conference on the Informed Brain in the Digital World, (Irvine, CA, November 15-17, 2012).

Strayer, D. L. (2013). Multitasking in the Automobile: Lessons From the Road on Limited Capacity Attention. APS-David Myers Distinguished Lecture on the Science and Craft of Teaching Psychology, (Washington D.C., May 24, 2013).

Strayer, D. L. (2013). Deleterious Effects of Cognitive Distraction in the Vehicle. Briefings to AAA, NHTSA, NTSB, NSC, IIHS, GHSA, and US Congress in Washington D.C. (May 17-June 13).

Strayer, D. L. (2013). Driver Distraction: Past, Preset, and Future. Presented at the 2013 National Safety Council Congress and Exposition, (Chicago, IL, September 30, 2013).

Strayer, D. L. (2013). Attention and Multitasking: Lessons from the Roadway. Invited Presentation at the Facultad de Psicologia, University of Salamanca, (Salamanca, Spain, October 9, 2013).

Strayer, D. L. (2014). Keynote address at the University of Utah Undergraduate Research Symposium (April 2, 2014).

Strayer. D. L. (2014). Towards a Theory of Hierarchical Control in Driving. Keynote address at the 28th International Congress of Applied Psychology, (Paris, France, July 9, 2014).

Strayer. D. L. (2014). Translational Cognitive Neuroscience: Understanding Attention and Multitasking on the Roadway. Invited presentation at the 12th International Congress of Neuroscience, (Brisbane, Australia, July 28, 2014).

Strayer, D. L. (2014). The Myths of Multitasking. Invited presentation at the first annual Utah Governor’s Office of Management and Budget Conference, (Salt Lake City, September 3, 2014).

Strayer, D. L. (2014). Measuring Cognitive Distraction in the Vehicle: Assessing In-vehicle Voice-based Interactive Technologies. Separate staff briefings to NHTSA, NTSB, Senate Commerce Committee, House Technology and Infrastructure Committee, NSC, IIHS, GHSA, Toyota, Hyundai, Ford, GM, Mercedes, US Auto Alliance, Global Auto Alliance, CITA, Apple in Washington D.C. (September 22-26, 2014).

Strayer, D. L. (2014). Why Talking to Your Car Drives You to Distraction. Keynote presentation at Belmont University (Nashville, TN, Dec 1, 2014).

Strayer, D. L. (2015). Driven to Distraction by Talking to Your Car. Keynote address at the 2015 Mind Lecture Series, University of Kansas (Lawrence, KS, February 24, 2015).

Strayer, D L. (2015). The Science (and Politics) Behind Distracted Driving. Invited Keynote presentation at Weber State University (Ogden UT, March 19, 2015).

Invited participant at the National Transportation Safety Board Roundtable on *Disconnecting from Deadly Distractions* held in Washington D.C. (March 31, 2015).

Invited participant at the National Highway Traffic Safety on *Cognitive Distractions: What Were You Thinking?* held in Washington D.C. (May 12, 2015).

Strayer, D. L. (2015). Measuring Cognitive Distraction in the Vehicle: Phase III. Separate staff briefings to NHTSA, NTSB, Science, Space, and Technology Committee, Energy and Commerce Committee, NSC, IIHS, GHSA, Toyota, Hyundai, US Auto Alliance, Global Auto Alliance, CITA, Apple and Google in Washington D.C. (October 7-8, & October19-22).

Strayer, D. L. (2016). Cognition in the Wild. Invited Keynote presentation at the Nature Bridge *Evening on the Lake* held in Seattle, WA (March 11, 2016).

Strayer, D. L. (2016). Dashboard Technology: Friend or Foe? National Safety Council Webinar presented on April 16, 2016.

Strayer, D. L. (2016). Cognition and Nature. Invited Keynote presentation at Colby College, Waterville, ME (April 22, 2016).

Strayer, D. L. (2016). Why Talking to Your Car Can Drive You to Distraction. Invited Keynote presentation at the 6th International Conference on Traffic and Transportation Psychology, Brisbane, Australia (August 2-5, 2016)

Strayer, D. L. (2016). Invited Keynote presentation at Wisconsin’s 42nd Annual Governor’s Conference on Highway Safety, Green Bay, WI (August 24, 2016).

Strayer. D. L. (2016). Invited speaker at the Inaugural Psychology and U Series, University of Utah, Salt Lake City, UT (October 18, 2016).

Strayer D. L. (2016). Invited participant at the White House Roundtable on *The Heath Benefits of the Outdoors*, Washington, D.C. (October 20, 2016).

Strayer, D. L. (2016). The Herschel and Eileen Leibowitz Lecture, Penn State University, State College, PA (November 1, 2016).

Strayer, D. L. (2016). Invited Keynote presentation at the Australian Cognitive Neuroscience Meeting at Shoal Bay, Australia (November 24, 2016).

 Strayer, D. L. (2017). On the Visual and Cognitive Demands of Using In-Vehicle Information Systems. Separate staff briefings to NHTSA, NTSB, NSC, IIHS, GHSA, Toyota, Hyundai, US Auto Alliance, Global Auto Alliance, and Apple in Washington D.C. (September 7-9, 2017).

Strayer, D. L. (2017). Invited presentation at the Park City Institute, Park City, UT (September 13, 2017).

Strayer, D. L. (2017). The Science Behind Cognitive Distraction and Its Impact on Driver Distraction. Keynote presentation at the Network of Employers for Traffic Safety, Charlottesville, VA (October 11, 2017).

Strayer, D. L. (2017). The Multitasking Driver: Why Talking to Your Car Could Drive You to Distraction. Keynote presentation at the 34th Annual Utah Conference on Safety and Industrial Hygiene, Salt Lake City, UT (October 12, 2017).

Strayer, D. L. (2017). Restore your brain: Unplug from your digital device and tune into the natural world. TEDxManhattanBeach, Manhattan Beach, CA (November 4, 2017).

Strayer, D. L. (2018). Emerging technologies influencing distracted driving. Distracted Driving/Pedestrian Safety Summit (event co-sponsored by NHTSA Regions 1 and 2), Providence, RI (April 3, 2018).

Strayer, D. L., (2018). The science behind cognitive distraction and its impact on driver performance. Keynote presentation at the Washington’s 2nd Traffic Safety Conference (Target Zero), Kennewick, WA (April 24, 2018).

Strayer, D. L. (2018). Emerging technology, teens, and distracted driving. Keynote presentation at the 40th Annual Common Problems in Pediatrics Conference, Salt Lake City, UT, (June 6, 2018).

Strayer, D. L. (2018). On the visual and cognitive demands of using Apple’s CarPlay, Google’s Android Auto, and five different OEM infotainment systems. Separate staff briefings to NHTSA, NTSB, NSC, IIHS, GHSA, Google, and Apple in Washington D.C. (June 21-25, 2018).

Strayer, D. L., (2019). Cognitive Restoration Through Interactions in Nature. Symposium at the Museum of Contemporary Art, Sydney, Australia (April 20, 2019).

Strayer, D. L., (2019). Technology- Helpful or Hindrance? Invited general session presentation at Virginia’s 7th Annual Distracted Driving Summit, Roanoke, VA (September 26, 2019).

Strayer, D. L. (2019). Converging Evidence for the Restorative Benefits of Nature. Pediatric Grand Rounds, University of Utah, Salt Lake City, UT (December 12, 2019).

Strayer, D. L. (2020). Emerging Technologies Influencing Distracted Driving. Webinar for the BETA Health Group. (April 14, 2020).

Strayer, D. L., (2020). Symposium on Nature and Cognition at the Bayside Gallery, Melbourne, Australia (August 21, 2020).

*Revision date: January 15, 2021*

1. This paper received the Jerome Ely Human Factors Article award for best article in the 2015 volume of *Human Factors.* [↑](#footnote-ref-1)
2. This paper and the accompanying media release by AAA generated over 90 million media impressions. [↑](#footnote-ref-2)