



**CURRICULUM VITAE
NEIL H. CHARNESS**

September 2017

Biographical Data

Born: July 6, 1948.
Place: Montreal, Canada.
Citizenship: USA.

Academic History

1965-1969: McGill University, Honours BA
1969-1974: Carnegie Mellon University, MS, Ph.D.

Employment

1974-1977: Assistant Professor, Wilfrid Laurier University.
1977-1982: Assistant Professor, University of Waterloo.
1982-1990: Associate Professor, University of Waterloo.
1984-85: Sabbatical Fellow at the Mental Performance & Aging Laboratory, VA Outpatient Clinic, Boston, MA.
1985: Cross appointed to the Kinesiology Department, University of Waterloo.
1990-91: Visiting Scholar at the Psychology Department, University of Victoria, Victoria, BC
1991-1993: Professor, Psychology and Gerontology, University of Waterloo
1993: Professor, Department of Health Studies and Gerontology, University of Waterloo
1993: Visiting Scientist, Max Planck Institute for Human Development and Education, Berlin (4 months).
1994: Professor, Psychology, Florida State University; Research Affiliate, Pepper Institute on Aging and Public Policy, The Florida State University
2000 Research Associate, Pepper Institute on Aging and Public Policy, The Florida State University
2006 William G. Chase Professor of Psychology, Florida State University

Memberships in Associations

Canadian Association on Gerontology: Chairman, Psychology Division, 1984-85. Member, Management Committee, 1984-85; Member of nominating committee for the Psychology division, 1990.

Canadian Psychological Association, Member of nominating committee for Section on Gerontological Psychology, 1990.

Chair, Section 17 (Adult Development and Aging), 1993-94
Fellow, 1993.

American Psychological Association: Member since 1992; Fellow, Division 20 (Adult Development and Aging), 1995; Program Chair, Division 20, 1998; elected Member-at-Large, 2002; elected President-elect 2004; Elected to Committee on Aging, 2010. Fellow Division 21 (Applied Experimental and Engineering Psychology). Fellow Division 3 (Experimental).

Human Factors and Ergonomics Society: Member since 1993

Gerontological Society of America: Fellow, 1994

Association for Psychological Science: Fellow, 1997.

American Telemedicine Association: Chair, Human Factors SIG

Sigma Xi

International Society of Gerontechnology: founding board member, 1996; executive committee, program committee, 1999; Awarded Honorary Member, 2008.

Awards

Jack A. Kraft Innovator Award (with CREATE colleagues) from the Human Factors and Ergonomics Society, 2013.

The Franklin V. Taylor Award for Outstanding Contributions in the Field of Applied Experimental / Engineering Psychology, from Division 21 (Applied Experimental and Engineering Psychology) of the American Psychological Association, 2016.

M. Powell Lawton Distinguished Contribution Award for Applied Gerontology, from Division 20 (Adult Development and Aging) of the American Psychological Association, 2016.

American Psychological Association inaugural (2016) Prize for Interdisciplinary Team Research, awarded to the Center for Research and Education on Aging and Technology Enhancement (CREATE). Neil Charness is one of the Principal Investigators.

Grants

Quebec Postdoctoral Fellowship, 1974 (refused).

Wilfrid Laurier Summer Research Fellowship, 1975.

Natural Sciences and Engineering Research Council of Canada: Grant A0790, *Aging and Skilled Problem Solving*. 1977-80, 1980-83, 1983-86, 1986-89, 1989-92, 1992-95.

Social Sciences and Humanities Research Council of Canada: Leave Fellowship (451-84-4284), 1984-85 for *Attitudes Mediating the Effectiveness of CAI with Older Adults*.

Digital Equipment Canada/University of Waterloo: 1984-1988. Equipment Grant, *Office Automation and the Older Worker*.

Bell-Northern Research: 1987, 1988 (to support Ph.D. candidate, Elizabeth Bosman), *Aging and keyboard performance*.

Canadian Government's National Networks of Centres of Excellence Program, *Canadian Aging Research Network: Promoting Independence and Productivity in an Aging Society*, Cognitive Group, University of Waterloo node, 1990-1995.

DAAD, New York (German Government Academic Exchange) Award for Study Visit to Germany for 2 months, 1993.

Retirement Research Foundation: 1994-95, "An applied perspective on legibility and aging" (\$20,680).

Retirement Research Foundation: 1995-97, "Improving Access to Public Services for Seniors: Luminance, Legibility and Noise". (\$42,727)

National Institutes of Health/National Institute on Aging, 1996-2000, R01 AG13969-01 "Life-span Expertise". (\$602,319, direct costs)

National Institutes of Health/National Institute on Aging, 1998-1999, 3 R01 AG13969-02S1 Research Supplement for Underrepresented Minorities for "Life-span Expertise". (\$67,288, direct costs)

National Institutes of Health/National Institute on Aging, 1999-2004, 1 PO1 AG17211, Co-Principal Investigator, Project CREATE (Center for Research and Education on Aging and Technology Enhancement). PI is Sara Czaja, University of Miami. (\$379,784, direct costs)

Alzheimer's Association. 2002. Conference Grant for Student Support for Gerontechnology 2002 Conference. (\$2000).

Social Sciences and Humanities Research Council (Canada) Grant 512-2002-1001, 2002-2006. "Aging Workforce in The New Economy". Co-Principal Investigator, US Team. PI is Julie McMullin, University of Western Ontario, Canada. (~\$460,000 direct costs for US component; ~\$100,000 for FSU, shared with Dr. Melissa Hardy, co-PI)

National Science Foundation, 2003. Co-Investigator for a Catalyst Award for a Science of Learning Center for the study of Expertise. Awarded to the Associates of the Florida Alliance for the Study of Expertise. (\$220,000).

- National Institutes of Health/National Institute on Aging, 2004-2009, Continuation of 1 PO1 AG17211, Co-Principal Investigator, Project CREATE II (Center for Research and Education on Aging and Technology Enhancement). PI is Sara Czaja, University of Miami. (~\$657,000, direct costs).
- Florida Department of Transportation, 2007-2008; Intersection and Pedestrian Safety Research. \$328,000 total costs.
- Florida Department of Transportation, BDK83-977-09, 2009-2011; Intersection and Pedestrian Safety Research. \$215,000 total costs.
- National Institute on Aging Sub-contract for an SBIR to AFrame Digital, Non-Intrusive Automated Portable Data Collection System for Aging Surveys, 2009-2010 “Evaluating reliability of and comfort for a portable vital signs monitoring device with older adults”. (\$28,980)
- National Institutes of Health/National Institute on Aging, 2009-2014, Continuation of 1 PO1 AG17211, Co-Principal Investigator, Project CREATE III (Center for Research and Education on Aging and Technology Enhancement). Co-PI is Walter Boot. (~\$1,000,000, direct costs).
- Florida Department of Transportation, BDK83-977-12, 2011-2012; Aging Driver and Pedestrian Safety: Parking Lot Hazards study. (\$130,000, total costs). Co-PI is Walter Boot
- Florida Department of Transportation, BDK83-977-15, 2011-2012; Aging Driver and Pedestrian Safety: Bicyclist and Pedestrian Safety. (\$247,618 total costs); Role co-PI. PI is Walter Boot.
- Sub-contract from Hogeschool Utrecht, PETZ (Predictors for the Use of e-Health by older adults and professional caregivers), 2011-2013, (31,000 €total costs). Co-PI Walter Boot.
- National Institutes of Health/National Institute on Aging, Co-PI, R44 AG29196 , 2012-2014, Sub-contract for a Phase II SBIR to AFrame Digital, “Aging Surveys II”, (~\$380,000 total costs). PI is Amy Papadopolous (AFrame Digital), Role is co-PI with co-PI Walter Boot.
- Florida Department of Transportation, BDK83 977-21, 2012-2014; Aging Road User Studies of Crosswalk and Intersection Safety, (~\$354,000 total costs), Role co-PI; PI is Walter Boot.
- US Department of Transportation. UTC Tier 1. Safe and Accessible Transportation for an Aging Population, (~1,400,000 in direct costs). John Sobanjo, PI. Role: co-PI and Associate Director.
- National Institutes of Health/National Institute on Aging, 2015-2020, 4 PO1 AG17211, Co-Principal Investigator, Project CREATE IV (Center for Research and Education on Aging and Technology Enhancement). Co-PI at FSU is Walter Boot. (~\$1,000,000, direct costs).
- Florida Department of Transportation, BDV30 TWO 977-10, 6/2014-9/30/2015. Driving simulator studies of the effectiveness of countermeasures to prevent wrong way crashes. (\$220,838 in costs). Role co-PI, PI is Walter Boot.
- Florida Department of Transportation, BVD30 TWO 977-11, 5/29/2014-12/31/2015: Enhanced mobility for aging population using automated vehicles. (\$305,838 in costs). Role co-PI, PI is Michael Duncan.
- Florida Department of Transportation, BVD30 TWO 977-15. Human factors guidelines to develop educational tip cards for aging road users. (\$215,000 in costs). PI is Neil Charness; Co-PIs Walter Boot, Michael Kaschak, Laura Arpan; Co-Is Juliann Cortese, Russell Clayton.

Editorial Appointments:

- Editor, Psychology section, 1985-1989. *Canadian Journal on Aging/Revue Canadienne du Vieillissement*.
- Editorial Board, 1987-1991; 2000+ *Journal of Gerontology: Psychological Sciences*.
- Editorial Board, 1987+ John Wiley & Sons: *Human Performance and Cognition* series.
- Editorial Board: 1993-1996. *Aging, Neuropsychology, and Cognition*.
- Editorial Board: 1994-1996. *Psychological Bulletin*.
- Editorial Board, 1992-2001; 2003+ *Psychology and Aging*.
- Editorial Board, 2001+ *Gerontechnology*.
- Editorial Board: 2007-2010 *Journal of Experimental Psychology: Applied*.

Courses Taught

Introductory Psychology, Cognition, Memory, Research Methodology, Problem-solving, Sensory Processes/Perception, Measurement in Psychology, Aging and Basic Psychological Processes, Aging and Human Performance, Cognitive Psychology of Skill, Issues in Cognitive Assessment in Aging, Introduction to Expertise and Skill Acquisition, Age and Human Factors, Age and Cognition.

MA and MASC Students Supervised and Year of Graduation

Jamie Campbell 1982, MA Psychology
Gail Langer/Gluckman 1989, MASC Psychology
Jennifer Healey 1989, MASC Psychology
Susan Petelka 1989, MASC Psychology
Cynthia Schumann 1990, MASC Psychology
Claudine Carlson 1992, MASC Psychology
Catherine Kelley, 1993, MA Gerontology
Lynn Williamson, 1993, MA Gerontology
Terry Gillis, 1994, MASC Psychology/Gerontology
Laurie Smith, 1994, MASC Psychology
Sherry Obenauer, 1994, MA Gerontology
Kim Anatooshkin, 1994, MASC Psychology/Gerontology
Steve Schultetus, 1999, MS Psychology
Michael Tuffiash, 2002, MS Psychology
Tiffany Jastrzembki, 2003, MS Psychology
Mark Fox, 2008, MS Psychology
Ryan Yordon, 2009, MS Psychology
Ryan Best, 2011, MS Psychology
Avner Dachoach, 2011, MS Psychology
Dustin Souders, 2013, MS Psychology
Cary Stothart, 2013, MS Psychology

Doctoral Students Supervised and Year of Graduation

Jamie Campbell 1985
Jane Clifton 1986
Jeff Graham 1987
Elizabeth Bosman 1991
Sherrie Bieman-Copland 1992
Mert Cramer, Computer Science, University of Waterloo (Co-supervised with Frank Tompa), 1994
Wanda Towers, 1996
Catherine Kelley, 1996
Robert Elliott, 2002
Tiffany Jastrzembki, 2006
Tres Roring, 2008
Mark Fox, 2011
Cary Stothart, 2016
Ryan Best, 2016

In Progress

Dustin Souders

Post Doctoral Students

Katinka Dijkstra, Psychology, FSU
David Mireles, Psychology, FSU
Patricia Holley, Psychology, FSU
Clare MacMahon, Psychology, FSU
David Rodrick, Psychology, FSU
Jong-Sung Yoon, Psychology, FSU

Administrative Experience:

University of Waterloo

Undergraduate Psychology advisor
 Co-operative Psychology Program advisor
 Division Chair of Cognition/Perception
 Member of the Arts Faculty Council on Co-operative Education
 Member of the University Committee on Gerontology
 Graduate Officer for the University Gerontology Program
 Graduate Officer for Special Programs in Psychology
 Associate Chair, Undergraduate Program, Psychology
 Associate Dean for Computing and Communications, Faculty of Arts
 Senate Research Council Representative for Faculty of Applied Health Sciences
 Associate Chair, Graduate Studies, Department of Health Studies and Gerontology

The Florida State University

Director, Cognitive and Behavioral Sciences Area, Psychology Department, Florida State University
 Chair, Electronic Communications Committee, Psychology Department
 Member: Undergraduate Affairs Committee, Graduate Affairs Committee, Faculty Development Committee, Executive Committee, Building Committee (Psychology Department)
 Member: Promotion & Tenure Committee, Graduate Entrance Scholarship Committee (College of Arts & Sciences)
 Member: University Senate
 Member: Committee on Research and Creativity (CRC: University level)
 Chair: Committee on Research and Creativity (2000-2002)
 Chair: CRC Grant Program Evaluation Committee (2002-2003)
 Member: Corporate R&D Coordination Committee (2002-2003).
 Member: Committee on Research and Creativity Steering Committee (2005-2012)
 Member: Pathways of Excellence Committee (2007)
 Associate Director, University Transportation Center on Accessibility and Safety for an Aging Population (ASAP) (2013+)
 Interim Director, Institute for Successful Longevity (2013-2014)
 Director, Institute for Successful Longevity (2015+)

Current Research Activities

Age and Human Factors for Technology Use; Age and Transportation Safety; Age and Expert Performance.

Refereed Journal Publications

1. Charness, N., and Bregman, A.S. (1973). Transformations in the recognition of visual forms. *Canadian Journal of Psychology*, 27, 367-380.
2. Charness, N. (1976). Memory for chess positions: Resistance to interference. *Journal of Experimental Psychology: Human Learning and Memory*, 2, 641-653.
3. Charness, N. (1979). Components of skill in bridge. *Canadian Journal of Psychology*, 33, 1-16.
4. Charness, N. (1981). Aging and skilled problem solving. *Journal of Experimental Psychology: General*, 110, 21-38. (Reprinted in Lawton, M. P., & Salthouse, T. A. (Eds.) (1998). *Essential papers on the psychology of aging*. New York: New York University Press.)
5. Charness, N. (1981). Search in chess: Age and skill differences. *Journal of Experimental Psychology: Human Perception and Performance*, 7, 467-476.
6. Charness, N. (1981). Visual short-term memory and aging in chess players. *Journal of Gerontology*, 36, 615-619.
7. Charness, N. (1982). Problem solving and aging: Evidence from semantically rich domains. *Canadian Journal on Aging*, 1, 21-28.
8. Charness, N. (1983). Age, skill, and bridge bidding: A chronometric analysis. *Journal of Verbal Learning and Verbal Behavior*, 22, 406-416.

9. Charness, N. (1987). Component processes in bridge bidding and novel problem-solving tasks. *Canadian Journal of Psychology*, *41*, 223-243.
10. Charness, N. (1988). The role of theories of cognitive aging: Comment on Salthouse. *Psychology and Aging*, *3*, 17-21.
11. Charness, N. & Campbell, J. I. D. (1988). Acquiring skill at mental calculation in adulthood: A task decomposition. *Journal of Experimental Psychology: General*, *117*, 115-129.
12. Milberg, W., Alexander, M.P., Charness, N., McGlinchey-Berroth, R., & Barrett, A. (1988). Learning a complex arithmetic skill in amnesia: Evidence for a dissociation between compilation and production. *Brain and Cognition*, *8*, 91-104.
13. Charness, N., Milberg, & Alexander, M.P. (1988). Teaching an amnesic a complex cognitive skill. *Brain and Cognition*, *8*, 253-272.
14. Zandri, E. & Charness, N. (1989). Training older and younger adults to use software. *Educational Gerontology*, *15*, 615-631.
15. McGlinchey-Berroth, R., Milberg, W. P., & Charness, N. (1989). Learning of a complex arithmetic skill in dementia: Further evidence for a dissociation between compilation and production. *Cortex*, *25*, 697-705.
16. Campbell, J.I.D. & Charness, N. (1990). Age-related declines in working memory skills: Evidence from a complex calculation task. *Developmental Psychology*, *26*, 879-888.
17. Charness, N. (1992). The impact of chess research on cognitive science. *Psychological Research*, *54*, 4-9.
18. Charness, N., Schumann, C. E., & Boritz, G. M. (1992). Training older adults in word processing: Effects of age, training technique, and computer anxiety. *International Journal of Technology and Aging*, *5*, 79-106.
19. Charness, N. & Bosman, E. A. (1994). Age-related changes in perceptual and psychomotor performance: Implications for engineering design. *Experimental Aging Research*, *20*, 45-59.
20. Bieman-Copland, S. & Charness, N. (1994). Memory knowledge and memory monitoring in adulthood. *Psychology and Aging*, *9*, 287-302.
21. Ericsson, K. A. & Charness, N. (1994). Expert performance: Its structure and acquisition. *American Psychologist*, *49*, 725-747.
22. Kelley, C. L., & Charness, N. (1995). Issues in training older adults to use computers. *Behaviour and Information Technology*, *14*(2), 107-120.
23. Charness, N. (1995). Psychological Models of Aging: How, who, and what? A comment. *Canadian Journal on Aging*, *14*, 67-73.
24. Ericsson, K. A., & Charness, N. (1995). Abilities: Innate talent or characteristics acquired through engagement in relevant activities? *American Psychologist*, *50*, 803-804.
25. Charness, N., & Gerchak, Y. (1996). Participation rates and maximal performance: A Log-linear explanation for group differences, such as Russian and male dominance in chess. *Psychological Science*, *7*, 46-51.
26. Charness, N. (1998). Explaining exceptional performance: Constituent abilities and touchstone phenomena. *Behavioral and Brain Sciences*, *21*, 410-411.
27. Kelley, C.L., Bosman, E.A., Charness, N.H., & Mottram, M.A. (1998). Reliability assessment of a user proficiency measurement technique. *International Journal of Human-Computer Interaction*, *10*, 33-49.
28. Charness, N., & Dijkstra, K. (1999). Age, luminance, and print legibility in homes, offices, and public places. *Human Factors*, *41*(2), 173-193.
29. Schultetus, S. & Charness, N. (1999). Recall vs. position evaluation revisited: The importance of position-specific memory in chess skill. *American Journal of Psychology*, *112* (4), 555-569.
30. Reingold, E. M., Charness, N., Pomplun, M., & Stampe, D. M. (2001). Visual span in expert chess players: Evidence from eye movements. *Psychological Science*, *12*, 48-55.
31. Charness, N., Kelley, C. L., Bosman, E. A., & Mottram, M. (2001). Word processing training and retraining: Effects of adult age, experience, and interface. *Psychology and Aging*, *16*, 110-127.
32. Charness, N., & Holley, P. (2001). Human factors and environmental support in Alzheimer's disease. *Aging and Mental Health*, *5*, S65-S73.

33. Charness, N. (2001). Commentary: A historical perspective on the United States-Canada connection in the psychology of aging. *Canadian Journal on Aging/la Revue canadienne du vieillissement*, 20, suppl. 1, 149-159.
34. Reingold, E. M., Charness, N., Schultetus, R. S., & Stampe, D. M. (2001). Perceptual automaticity in expert chess players: Parallel encoding of chess relations. *Psychonomic Bulletin and Review*, 8, 504-510.
35. Czaja, S. J., Sharit, J., Charness, N., Fisk, A. D., & Rogers, W. (2001). The Center for Research and Education on Aging and Technology Enhancement (CREATE): A program to enhance technology for older adults. *Gerontechnology*, 1, 50-59.
36. Charness, N., Reingold, E. M., Pomplun, M., & Stampe, D. M. (2001). The perceptual aspect of skilled performance in chess: Evidence from eye movements. *Memory and Cognition*, 29, 1146-1152.
37. Mireles, D. E., & Charness, N. (2002). Computational explorations of the influence of structured knowledge on age-related cognitive decline. *Psychology and Aging*, 17, 245-259.
38. Charness, N., Holley, P., Feddon, J., & Jastrzembski, T. (2004). Light pen use and practice minimize age and hand performance differences in pointing tasks. *Human Factors*, 46, 373-384.
39. Charness, N. & Holley, P. (2004). The new media and older adults: Usable and useful? *American Behavioral Scientist*, 48, 416-433.
40. Charness, N., Tuffiash, M., Krampe, R., Reingold, E. M., & Vasyukova, E. (2005). The role of deliberate practice in chess expertise. *Applied Cognitive Psychology*, 19, 151-165.
41. Jastrzembski, T., Charness, N., Holley, P. & Feddon, J. (2005). Input devices for web browsing: Age and hand effects. *Universal Access in the Information Society*, 4, 39-45.
42. Jastrzembski, T., Charness, N., & Vasyukova, C. (2006). Expertise and age effects on knowledge activation in chess. *Psychology and Aging*, 21, 401-405.
43. Czaja, S. J., Charness, N., Fisk, A. D., Hertzog, C., Nair, S. N., Rogers, W. A., & Sharit, J. (2006). Factors Predicting the Use of Technology: Findings from the Center for Research and Education on Aging and Technology Enhancement (CREATE). *Psychology and Aging*, 21, 333-352.
44. Charness, N. (2006). Work, older workers and technology. *Generations*, 30, 25-30.
45. Roring, R. W., Hines, F. G., & Charness, N. (2006). Age-related identification of emotions at different image sizes. *Human Factors*, 48, 675-681.
46. Roring, R. W., Hines, F. G., & Charness, N. (2007). Age differences in identifying words in synthetic speech. *Human Factors*, 49, 25-31.
47. Roring, R.W., & Charness, N. (2007). A multilevel model analysis of expertise in chess across the lifespan. *Psychology and Aging*, 22, 291-299.
48. Jastrzembski, T. S. & Charness, N. (2007). The Model Human Processor and the older adult: Parameter estimation and validation within a mobile phone task. *Journal of Experimental Psychology: Applied*, 13, 224-248
49. Jastrzembski, T., & Charness, N. (2007). What older adults can teach us about designing better ballots. *Ergonomics in Design*, 15, 6-11.
50. Charness, N. (2008). Aging and human performance. *Human Factors*, 50, 548-555.
51. Charness, N., & Tuffiash, M. (2008). The role of expertise research and human factors in capturing, explaining, and producing superior performance. *Human Factors*, 50, 427-432.
52. Weaver, S. J., Charness, N., Dijkstra, K., & Jastrzembski, T. (2008). Musculoskeletal pain prevalence in randomly sampled university employees: Age and gender effects. *Gerontechnology*, 7, 279-292.
53. Charness, N. & Boot, W. R. (2009). Aging and Information Technology Use: Potential and Barriers. *Current Directions in Psychological Science*, 18, 253-258.
54. Dijkstra, K., Charness, N., Yordon, R., & Fox, M. (2009). Changes in physiological and self-reported stress in younger and older adults after exposure to a stressful task. *Aging, Neuropsychology and Cognition*, 16, 338-356.
55. Fox, M. C., & Charness, N. (2010). How to gain eleven IQ points in ten minutes: Thinking aloud improves Raven's Matrices performance in older adults. *Aging, Neuropsychology and Cognition*, 17, 191-204.
56. Charness, N., Dijkstra, K., Jastrzembski, T. S., Weaver, S. J., & Champion, M. (2010). Are laptop computers a health risk for an aging population? *Gerontechnology*, 9, 415-420.
doi:10.4017/gt.2010.09.03.005.00

57. Demiris, G., Charness, N., Krupinski, E., Ben-Arieh, D., Washington, K., Wu, J. & Farberow, B. (2010). The role of human factors in telehealth. *Journal of Telemedicine & E-Health*, 16 (4), 446-453. DOI: 10.1089=tmj.2009.0114.
58. Mitzner, T. L., Boron, J. B., Fausset, C. B., Adams, A. E., Charness, N., Czaja, S. J., Dijkstra, K., Fisk, A. D., Rogers, W. A., & Sharit, J. (2010). Older adults talk technology: Technology usage and attitudes. *Computers in Human Behavior* (2010), doi:10.1016/j.chb.2010.06.020
59. Olson, K. E., O'Brien, M., Rogers, W. A., & Charness, N. (published online 2010, 28 Sept). Diffusion of Technology for Younger and Older Adults. *Ageing International*, 36, 123-145. DOI 10.1007/s12126-010-9077-9.
60. Charness, N. & Czaja, S. J. (2011). Raising the minimal retirement age: Psychological issues. *Public Policy & Aging Report*, 21, 29-32.
61. Charness, N. (2012). Patterns of theorizing about chess skill – Commentary on Linhares and Freitas (2010) and Lane and Gobet (2010). *New Ideas in Psychology*, 30, 322-324. DOI: 10.1016/j.newideapsych.2011.12.004.
62. Charness, N., Best, R., & Souders, D. (2012). Memory function and supportive technology. *Gerontechnology*, 11, 22-34; doi:10.4017/gt.2012.11.01.006.00.
63. Moxley, J. H., Ericsson, K. A., Charness, N., & Krampe, R. T. (2012). The role of intuition and deliberative thinking in experts' superior tactical decision-making. *Cognition*. 124, 72-78. <http://dx.doi.org/10.1016/j.cognition.2012.03.005>.
64. Boot, W. R., Champion, M., Blakely, D. P., Wright, T., Souders, D., & Charness, N. (2013). Video games as a means to reduce age-related cognitive decline: Attitudes, compliance, and effectiveness. *Frontiers in Psychology*, 4, 1-9. DOI=10.3389/fpsyg.2013.00031.
65. Moxley, J. H., & Charness, N. (2013). Meta-analysis of age and skill effects on recalling chess positions and selecting the best move. *Psychonomic Bulletin & Review*, 20, 1017-1022. doi:10.3758/s13423-013-0420-5
66. Charness, N., Fox, M., Papadopoulos, A., & Crump, C. (2013). Metrics for assessing the reliability of a telemedicine remote monitoring system. *Telemedicine and e-Health*, 19, 487-492. DOI: 10.1089/tmj.2012.0143.
67. Boot, W. R., Stothart, C., & Charness, N. (2013). Improving the safety of aging road users – A Mini-Review. *Gerontology*, 60, 90-96. DOI: 10.1159/000354212
68. Charness, N. (2014). Utilizing technology to improve older adult health. *Occupational Therapy in Health Care*, 28, 21-30. DOI: 10.3109/07380577.2013.865859.
69. MacMahon, C. & Charness, N. (2014). Focus of attention and automaticity in handwriting. *Human Movement Science*, 34, 57-62.
70. Mitzner, T. L., Rogers, W. A., Fisk, A. D., Boot, W. R., Charness, N., Czaja, S. J., & Sharit, J. (2014). Predicting older adults' perception about a computer system designed for seniors. *Universal Access in the Information Society*, 15(2), 271-280. DOI 10.1007/s10209-014-0383-y.
71. Van Houwelingen, C. T., Barakat, A., Best, R., Boot, W. R., Charness, N., & Kort, H. S. (2015). Dutch Nurses' Willingness to Use Home Telehealth: Implications for Practice and Education. *Journal of Gerontological Nursing*, 41, 47-56. doi: 10.3928/00989134-20141203-01. [Epub ahead of print 2014].
72. Boot, W. R., Charness, N., Czaja, S. J., Sharit, J., Rogers, W. A., Fisk, A. D., Mitzner, T., Lee, C. C. & Nair, S. (2015). Computer proficiency questionnaire: Assessing low and high computer proficient seniors. *The Gerontologist*, 55, 404-411. doi:10.1093/geront/gnt117.
73. Czaja, S. J., Boot, W. R., Charness, N., Rogers, W. A., Sharit, J., Fisk, A. D., Lee, C. C., Nair, S. N. (2015). The personalized reminder information and social management system (PRISM) trial: Rationale, methods and baseline characteristics. *Contemporary Clinical Trials*, 40, 35-46. <http://dx.doi.org/10.1016/j.cct.2014.11.004>
74. Wright, T. J., Vitale, T., Boot, W. R., & Charness, N. (2015, October 19). The Impact of Red Light Running Camera Flashes on Younger and Older Drivers' Attention and Oculomotor Control. *Psychology and Aging*. Advance online publication. <http://dx.doi.org/10.1037/pag0000052>
75. Best, R., & Charness, N. (2015). Age differences in the effect of framing on risky choice: A meta-analysis. *Psychology and Aging*, 30, 688-698. <http://dx.doi.org/10.1037/a0039447>

76. Souders, D. J., Gepner, B., Charness, N., & Wekezer, J. (2015). Older adults as cutaway bus passengers: User-centered literature review. *Transportation Research Record*, 2516, 27-34. DOI: 10.3141/2516-05
77. Dijkstra, K., Charness, N., Yordon, R., & Price, J. (2015). The role of coping, relaxation, and age on stress and task performance with new technology, *Gerontechnology*, 13 (4), 388-395. doi:10.4017/gt.2015.13.4.003.00
78. Evans, J., Papadopoulos, A., Tsien Silvers, C., Charness, N., Boot, W. R., Schlachta-Fairchild, L., & Crump, C. (2016). Remote health monitoring for older adults and those with heart failure: Adherence and system usability. *Telemedicine and e-Health*, 22 (6), 480-488. DOI: 10.1089/tmj.2015.0140.
79. Souders, D. J., Boot, W. R., Charness, N., & Moxley, J. H. (2016). Older adult video game preferences in practice: Investigating the effects of competing or cooperating. *Games and Culture*, 11(1-2), 170-200. DOI: 10.1177/1555412015603538
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190. Roque, N. A., Boot, W. R., Charness, N., Barajas, K., Dirghalli, J., & Mitchum, A. (2016). The flashing right turn signal with pedestrian indication: A human factors study to assess driver comprehension. In J. Zhou & Salvendy, G. (Eds). Human aspects of IT for the aged populations: Design for aging. Second International Conference, ITAP 2016, Held as Part of HCI International 2016, Toronto, ON, Canada, July 17–22, 2016, Proceedings, Part I, P. 417-427. Springer.
 191. Souders, D., & Charness, N. (2016). Challenges of older drivers' adoption of advanced driver assistance systems and autonomous vehicles. In J. Zhou & Salvendy, G. (Eds). Human aspects of IT for the aged populations: Design for aging. Second International Conference, ITAP 2016, Held as Part of HCI International 2016, Toronto, ON, Canada, July 17–22, 2016, Proceedings, Part I, P. 428-440. Springer.
 192. Stothart, C., Boot, W. R., Simons, D., Charness, N., & Wright, T. (2016). Age effects on inattentive blindness: Implications for driving. In J. Zhou & Salvendy, G. (Eds). Human aspects of IT for the aged populations: Design for aging. Second International Conference, ITAP 2016, Held as Part of HCI International 2016, Toronto, ON, Canada, July 17–22, 2016, Proceedings, Part I, P. 441-448. Springer.
 193. Boot, W. R., Sharit, J., Czaja, S. J., Charness, N., & Rogers, W. A. (2016). Exploring the Relationship Between Computer Proficiency and Computer Use Over Time in the PRISM Trial. In J. Zhou & Salvendy, G. (Eds). Human aspects of IT for the aged populations: Design for aging. Second International Conference, ITAP 2016, Held as Part of HCI International 2016, Toronto, ON, Canada, July 17–22, 2016, Proceedings, Part I, P.300-307. Springer.
 194. Boot, W. R., Souders, D., Charness, N., Blocker, K., Roque, N., & Vitale, T. (2016.) The gamification of cognitive training: Older adults' perceptions of and attitudes toward digital game-based interventions. In J. Zhou & Salvendy, G. (Eds). Human aspects of IT for the aged populations: Design for aging. Second International Conference, ITAP 2016, Held as Part of HCI International 2016, Toronto, ON, Canada, July 17–22, 2016, Proceedings, Part I, P. 290-300. Springer. (Best paper award.)
 195. Sarcar, S., Munteanu, C., Jokinen, J. P. P., Oulasvirta, A., Slipaswuwanchai, C., Charness, N., Dunlop, M., & Ren, X. (2017). Designing mobile interactions for an ageing population. CHI '17 Extended Abstracts, P. 506-509. May 06-11, 2017, Denver, CO, USA ACM 978-1-4503-4656-6, 6/17/05. <http://dx.doi.org/10.1145/3027063.3027074>

Technical Reports

1. Czaja, S. J., Charness, N., Dijkstra, K., Fisk, A. D., Rogers, W. A., & Sharit, J. (2006). *CREATE Common Core Battery Measures* (CREATE-2006-01).
2. Czaja, S. J., Charness, N., Dijkstra, K., Fisk, A. D., Rogers, W. A., & Sharit, J. (2006). *Demographic and Background Questionnaire* (CREATE-2006-02).
3. Czaja, S. J., Charness, N., Dijkstra, K., Fisk, A. D., Rogers, W. A., & Sharit, J. (2006). *Computer and Technology Experience Questionnaire* (CREATE-2006-01).
4. Mitzner, T.K., Adams, A.E., Fausset, C.B., Boron, J.B., Charness, N., Czaja, S.J., Dijkstra, K., Fisk, A.D., Rogers, W.A., & Sharit, J., (2008). *Focus group script and coding instructions for the CREATE cross-site focus group study of technology use* (HFA-TR-0801). Atlanta, GA: Georgia Institute of Technology, School of Psychology, Human Factors and Aging Laboratory.
5. Charness, N., Champion, M., Mitchum, A., & Fox, M. (2009). Final Report: Intersection and Pedestrian Safety Research BD543-17. http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_TE/FDOT_BD543_17_rpt.pdf
6. Charness, N., Champion, M., Cowing, B., Mitchum, A., & Stothart, C. (2011). Final Report: Aging Driver and Pedestrian Safety: Human Factors Studies BDK83 977-09. Technical report submitted to the Florida Department of Transportation. http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_TE/FDOT_BDK83_977-09_rpt.pdf
7. Charness, N., Boot, W., Mitchum, A., Stothart, C., & Lupton, H. (2012). Final Report: Aging Driver and Pedestrian Safety: Parking Lot Hazards Study BDK83 977-12. Technical report submitted to Florida Department of Transportation: http://ntl.bts.gov/lib/45000/45500/45562/FDOT_BDK83_977-12_rpt.pdf

8. Boot, W. R., Charness, N., Stothart, C., Fox, M., Mitchum, A., Lupton, H., & Landbeck, R. (2013). Final Report: Aging road user, bicyclist and pedestrian safety: Effective bicycling signs and preventing left-turn crashes BDK83 977-15. Technical report to Florida Department of Transportation http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_TE/FDOT-BDK83-977-15-rpt.pdf
9. Boot, W., R., Charness, N., Mitchum, A., Landbeck, R., & Stothart, C. (2014). Final report: Aging road user studies of intersection safety. BDV30 TWO 977-04. Technical report submitted to Florida Department of Transportation: <http://ntl.bts.gov/lib/54000/54100/54145/FDOT-BDV30-977-04-rpt.pdf>
10. Boot, W., R., Charness, N., Roque, N., Barajas, K., Dirghalli, J., & Mitchum, A. (2015). Final Report: The Flashing Right Turn Signal with Pedestrian Indication: Human Factors Studies to Understand the Potential of a New Signal to Increase Awareness of and Attention to Crossing Pedestrians. BDV30-977-13. Technical report submitted to Florida Department of Transportation: http://www.dot.state.fl.us/research-center/Completed_Proj/Summary_TE/FDOT-BDV30-977-13-rpt.pdf
11. Duncan, M., Charness, N., Chapin, T., Horner, M., Stevens, L., Richard, A., Souders, D., Crute, J., Riemondy, A. & Morgan, D. (2015). Enhanced mobility for aging populations using automated vehicles. BDV30 977-11. Technical report submitted to Florida Department of Transportation. http://www.fdot.gov/research/Completed_Proj/Summary_PL/FDOT-BDV30-977-11-rpt.pdf
12. Ben-Arieh, D., Charness, N., Duckett, K., Krupinski, E., Leistner, G., & Strawderman, L. (2016). A Concise Guide for Telemedicine Practitioners: Human Factors Quick Guide Eye Contact. An American Telemedicine Association Human Factors SIG publication in collaboration with the Home Telehealth and Remote Monitoring SIG. <https://higherlogicdownload.s3-external-1.amazonaws.com/AMERICANTELEMED/Eye%20Contact%20Quick%20Guide.pdf?AWSAccessKeyId=AKIAJH5D414FWRALBOUA&Expires=1466110688&Signature=5%2FbKa8sN8HNwS2mLgsNBhAd9kU%3D>
13. Charness, N., Boot, W., Kaschak, M., Arpan, L., Cortese, J., Clayton, R., Roque, N., Paedae, B., & Barajas, K. (2017). BDV30 977-15. Final Report to Florida Department of Transportation. Human factors guidelines to develop educational tip cards for aging road users. http://www.fdot.gov/research/completed_proj/summary_TE/FDOT-BDV30-977-15-rpt.pdf

Recent Conference Papers and Colloquiums

339. Charness, N. (2017). Panelist in Jean-Marc Fix (Moderator) Senior Citizen in 2050 (General Session VI), Society of Actuaries: Orlando, FL, January.
340. Souders, D.J. & Charness, N. (February 2017). "Issues Surrounding the Use of Advanced Driver Assistance Systems and Autonomous Vehicles to Aid Safe Mobility for Life." Lectern presentation at the Safe Mobility for Life Coalition Winter Meeting, Tallahassee, FL.
341. Charness, N. (2017). Presenter. In CREATE workshop on Health Care Technologies for Older Adults: Design, Adoption, Implementation & Training Issues. Miami, FL, February 23-24.
342. Charness, N. (2017). Panelist. In R. Reiser (Moderator). Establishing and Managing Interdisciplinary Research Teams". College of Education, Florida State University, Tallahassee, FL, March 20.
343. Charness, N. (2017). Designing for reliability of home healthcare technologies for older adults. In W. R. Rogers (Moderator). Design for Older Adult Consumers of Health IT: Best Practice Guidance from CREATE. Human Factors and Ergonomics Society Health Conference, New Orleans, LA. March.
344. Charness, N. (2017). Presenter. In W. Boot & W. Rogers (Organizers). CREATE Webinar: Integrating older adults into today's work environment. Florida State University, April 3.
345. Sarcar, S., Munteanu, C., Jokinen, J. P. P., Oulasvirta, A., Slipasuwanchai, C., Charness, N., Dunlop, M., & Ren, X. (2017). Designing mobile interactions for an ageing population. CHI '17 Workshop. May 06, 2017, Denver, CO, USA
346. Charness, N., Boot, W. R., Evans, J., Best, R., Taha, J., Sharit, J., & Czaja, S. J. (2017). Constraints on telehealth adoption and use by older adults. In S. J. Czaja (organizer). Symposium: Technology to Support Health, Well-Being, and Productivity of Older Adults: Perspectives from CREATE. International Association on Gerontology and Geriatrics meeting. San Francisco: July.
347. Rogers, W. Mitzner, T., Boot, W., Charness, N., Czaja, S., & Sharit, J. (2017). Understanding Individual and Age-Related Differences in Technology Adoption. In S. J. Czaja (organizer). Symposium:

- Technology to Support Health, Well-Being, and Productivity of Older Adults: Perspectives from CREATE. International Association on Gerontology and Geriatrics meeting. San Francisco: July.
348. Boot, W., Roque, N., Charness, N., Rogers, W., Mitzner, T., Czaja, S., & Sharit, J. (2017). Older Adult Technology Proficiency and Technology Adoption. In S. J. Czaja (organizer). Symposium: Technology to Support Health, Well-Being, and Productivity of Older Adults: Perspectives from CREATE. International Association on Gerontology and Geriatrics meeting. San Francisco: July.
349. Czaja, S., Sharit, J., Boot, W., Charness, N., & Rogers, W. (2017). The Role of Technology in Supporting Social Engagement and Social Support Among Older Adults. In S. J. Czaja (organizer). Symposium: Technology to Support Health, Well-Being, and Productivity of Older Adults: Perspectives from CREATE. International Association on Gerontology and Geriatrics meeting. San Francisco: July.
350. Charness, N. (2017). Aging and inclusive design. In P. Green (Organizer). Human Factors Engineering Short Course. University of Michigan, Ann Arbor, MI, July.
351. Charness, N., Boot, W. R. & Dijkstra, K. (2017). CREATE: FSU Site. In S. J. Czaja (Moderator). CREATE Interdisciplinary Team Award Symposium. American Psychological Association Meetings, Washington, DC, August.
352. Charness, N. (2017). Franklin V. Taylor and the Challenges for Engineering Psychology in an Aging World. Franklin V. Taylor Award address. American Psychological Association Meetings, Washington, DC, August.
353. Souders, D.J., & Charness, N. (2017). "Can Advanced Driver Assistance Systems Support Accessibility and Safety for an Aging Population?" Lectern presentation at the Mid-Year Meeting for TRB's Committee on Safe Mobility of Older Person (ANB60), Wood's Hole, MA. August.
354. Charness, N. (2017). Panelist. In R. Goff-Albritton & B. Hodges (Moderators) Perfecting your elevator speech: An Interactive Faculty Workshop. Florida State University, Tallahassee, FL, August.
355. Charness, N. (2017). The Role of Telehealth in Older Adult Care. Capital Health Plan Savvy Seniors Lecture Series. Tallahassee, FL, September 1, 15.

Consultant Positions

- 1992-1994: Battelle-Seattle's Contract on In Vehicle Highway Systems/Advanced Traffic Information Systems from National Highway Traffic Safety Association.
- 1992-1995: Mitzi Johnson's National Institute on Aging grant on Age and Decision-Making.
- 1994: Human Factors North, Contract on "A Study Of The Effect Of Human Factors On Personal Mobility".
- 1998: Ohio Board of Regents: Viability of Psychology programs at the University of Akron.
- 2000: Rensselaer Polytechnic Institute: Viability of a program in Philosophy, Psychology and Cognitive Science.
- 2000: Expert Witness in Court Case for age effects on learning computer software, LaRosa vs. DEP, Judge Terry Lewis' Court, Tallahassee, Florida, Oct. 6.
- 2001: 3M Lead User Telemedicine Workshop. St. Paul, MN, July 19-21.
- 2001-2003: National Academies Committee on the Health and Safety Needs of Older Workers, Washington: DC.
- 2003: Appointment to the Governor's Florida At-Risk Drivers Committee.
- 2004-2005: Consultant to Lili Sahakyan & Peter Delaney's National Institute on Aging R03 grant.
- 2005: Consultant to AARP report on "Older Worker Training: What We Know and Don't Know".
- 2005+: Consultant to AFrame Digital, LLC, US, concerning human factors, age, and sensor systems (Scientific Advisory Board member).
- 2006-2009: Consultant to EasyUse/Commino, Israel, concerning software design for older adults (Scientific Advisory Board member).
- 2007: Consultant to Gordon DeFries about age and technology use concerning the Administration on Aging's plans to revise their locator service.
- 2009-2010: Consultant to National Research Council committee on the Role of Human Factors in Home Healthcare.
- 2010: Site visit panelist to Beckman Institute, UIUC, to evaluate the Human Computer Intelligent Interaction research program, May 5-7.

2009-2013: NSF site visit panelist evaluating an Engineering Research Center on Quality of Life Technology, Pittsburgh, PA.

2011: Consultant for NIA grant 1R01AG041284 – 01 to Dr. Bo Xie, University of Maryland, University of Texas, Austin.

2011: Consultant for IMLS grant (Project ALFA) to Dr. Laurie Bonnici, University of Alabama, Tuscaloosa.

2013-2014: Consultant to NIA SBIR Grant for Cameron Camp, Director of Research, Center for Applied Research in Dementia, Solon, Ohio.

2015: Panelist, Agency for Health Research & Quality (AHRQ) Special Emphasis Panel P30 grant review, July 22-23.

2015: Site visit panelist to Beckman Institute, UIUC, to conduct a review of the Biological Intelligence, Human Computer Intelligent Interaction Main Research Themes, Oct. 22-23.

2017: National Science Foundation Panel Reviewer.

2017: Issue specialist for AARP's Global Council on Brain Health. Global Council on Brain Health (2017). "Engage Your Brain: GCBH Recommendations on Cognitively Stimulating Activities." Available at: www.GlobalCouncilOnBrainHealth.org DOI: <https://doi.org/10.26419/pia.00001.001>

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