SOWON HAHN, Ph.D.

Department of Psychology • Seoul National University • Seoul, Korea Email: swhahn@snu.ac.kr • Phone: +82 10 2731 4589

PROFESSIONAL PROFILE

- Professor, Psychology, Seoul National University, 2018 to Present
- Associate Professor, Seoul National University, 2015 to 2017
- Associate Professor, University of Oklahoma, 2007 to 2014
- Assistant Professor, University of Oklahoma, 2001 to 2007
- Post-doctoral Researcher, University of California, Riverside, 1999 to 2001
- Post-doctoral Researcher, University of Illinois at Urbana-Champaign, 1998 to 1999

EDUCATION

- Ph.D., Cognitive Psychology, University of Illinois at Urbana-Champaign, 1997
- M.S., Cognitive Psychology, University of Illinois at Urbana-Champaign, 1994
- B.S., Psychology, Seoul National University, 1991

RESEARCH INTERESTS

• Cognitive Processing, Human Factors, Human-Robot Interaction, Affective Science, Smart Aging, Empathetic AI

TEACHING EXPERIENCE

- Psychology and Artificial Intelligence (K-MOOC)
- Human Factors; Human-AI Interaction; Human-Robot Interaction
- Introductory Psychology; Cognitive Psychology, Adult Development & Aging
- Affective Science; Attention and Performance; Applied Cognition

PROFESSIONAL SERVICE

- Editor, Korean Journal of Cognitive Science, 2021 to Present
- Academic Director, Korean Society of Cognitive Science, 2019 to 2020
- Director, Center for Psychological Sciences, SNU, 2017 to 2019
- Coordinator, Brain-Mind-Behavior Interdisciplinary Program, 2017 to 2019
- Chair, Crisis Counseling Department, Center for Campus Life & Culture, SNU, 2017 to Present
- Chair, International Public Relations Committee, Korean Psychological Association, 2016 to 2018

PUBLICATIONS

- **Hahn, S.** (2020). Neuroplasticity. Bada Publishing
- **Hahn, S.**, Lee, J., Song, J., Suh, B., Kwon, H., & Yun, M. (2020). Homo Machina, Future of Humans Living with Machines. Communication Books.
- Kim, K., Lee, Y., Ahn, H., Hahn, S., & Oh, S. (2020). Pedestrian intention prediction for autonomous driving using a multiple stakeholder perspective model. In *Proceedings of the 2020 IEEE/RSJ International Conference of Intelligent Robots and Systems (IROS)*.
- **Hahn, S.**, & Buttaccio, D. R. (2018). Aging and guided visual search: The role of visual working memory. *Aging, Neuropsychology, and Cognition*. 25(4), 535-549.
- Kim, J. S., Kim, J. W., **Hahn, S.**, & Kim, Y. S. (2018). The difference of body mass index according to smart phone proficiency in Koreans over the age of 60. *The Korean Journal of Sports Medicine*, *36*(4), 189-196.
- Oh, S., Hwang, J., Yew, J., & **Hahn, S.** (2018). Age differences of preference for humanoid AI speakers. *Korean Journal of Cognitive Science*, *29(1)*, 1-16.
- Park, G., Hyun, W., **Hahn, S**., & Suh, B. (2018). Smartphone usage research of elderly people by application log data. *Proceedings of HCI Korea 2018, 1,* 880-884.
- Park, S., **Hahn, S.**, Lee, T., & Jun, M. (2018). Two factor model of consumer satisfaction: International tourism research. *Tourism Management*, *67*, 82-88.
- Kim, J. S., Kim, J. W., **Hahn, S.**, & Kim, Y. S. (2018). The Difference of Body Mass Index According to Smart Phone Proficiency in Koreans over the Age of 60. *The Korean Journal of Sports Medicine*, *36*(4), 189-196.
- Kim, M., You, N. K., Kim, Y., Hahn, S., & Yun, M. H. (2017). P-2 Acceptability of a Robotic Agent in Older People using ICT ability. *The Japanese Journal of Ergonomics*, 53, S696-S698.
- **Hahn, S.** (2017). Emotion and attention: When the heart's eye guides the mind's eye. *Journal of Cognitive Science*, *18*(2), 103-115.
- **Hahn, S.** (2017). Cognitive aging and acceptance of the information and communications technology. *Journal of Management and Economics*, *56(1)*, 53-60.
- Huffman, W. B., & **Hahn, S.** (2017). Investigating optimal memory enhancement procedures in foreign language learning. *Applied Cognitive Psychology*, *31*(*5*), 539-545.
- Kim, M., You, N., Kim, Y., **Hahn, S**., & Yun, M. (2017). Acceptability of a robotic agent in older people using ICT ability. *The Japanese Journal of Ergonomics*, 53(2), S696-S698.
- Kim, M., You, N. K., Kim, Y., **Hahn, S.**, & Yun, M. H. (2017). Effects of ICT ability of the elderly people for the acceptability of conversational agent. *Proceedings of Ergonomics Society of Korea 2017*, 259-265.
- **Hahn, S.,** & Chung, Y. (2016). Neuroticism, attention, and eye movements. In A. Di Fabio (Ed.), *Neuroticism: Characteristics, Impact on Job Performance and Health Outcomes* (pp. 103-112). New York: Nova Publishers.
- **Hahn, S.**, Buttaccio, D., Hahn, J., & Lee, T. (2015). Personality and attention: Levels of neuroticism and extraversion can predict attentional performance

- during a change detection task. *Quarterly Journal of Experimental Psychology*, 68(6), 1041–1048.
- Huffman, W. B., & **Hahn, S.** (2015). Cognitive principles in mobile learning. *Psychology* 6, 456-463.
- Buttaccio, D. R., Lange, N. L., **Hahn, S.**, Thomas, R. P. (2014). Explicit awareness supports conditional visual search in the retrieval guidance paradigm. *Acta Psychologica*, *145*, 44-53.
- Buttaccio, D. R., Lange, N. D., **Hahn, S.**, Thomas, R. P., & Davelaar, E. J. (2013). Explicit awareness supports conditional visual search in the retrieval guidance paradigm. *Proceedings of the 35th Annual Meeting of the Cognitive Science Society*. Cognitive Science Society.
- Buttaccio, D. R., & Hahn, S. (2011). The influence of action on visual search: Behavioral response toward stimuli modifies the selection process. *Attention*, *Perception*, & *Psychophysics*, 73(5), 1453-1466.
- Buttaccio, D. R., & **Hahn, S.** (2010). The effect of behavioral response on affective evaluation. *Acta Psychologica*, *135*, 343-348.
- Thomas, R. P., Hahn, S., Lange, N.D., Buttaccio, D., Alberts, T., Dougherty, M.R., & Rose, L. (2010). Target identification and assessment in visual intelligence, surveillance, & reconnaissance. *Proceedings of the Missile Defense Sensors, Environments and Algorithms;* published by the Military Sensing Information Analysis Center (SENSIAC), a Department of Defense chartered Information Analysis Center.
- **Hahn, S.**, & Gronlund, S.D. (2007). Top-down guidance in visual search for facial expressions. *Psychonomic Bulletin & Review, 14,* 159-165.
- **Hahn, S.**, Carlson, C., Singer, S., & Gronlund, S. D. (2006). Aging and visual search: Automatic and controlled attentional bias to threat faces. *Acta Psychologica*, 123, 312-336.
- **Hahn, S.**, Andersen, G. J., & Kramer, A. F. (2004). Age influences on multi-dimensional set switching. *Aging, Neuropsychology, and Cognition, 11,* 25-36.
- **Hahn, S.,** Andersen, G. J., & Saidpour, A. (2003). Static scene analysis for the perception of heading. *Psychological Science*, *14*, 543-548.
- **Hahn, S.**, Andersen, G. J., & Kramer, A. F. (2003). Multi-dimensional set switching. *Psychonomic Bulletin and Review, 10,* 503-509.
- Colcombe, A., Kramer, A.F., Irwin, D. E., Peterson, M., Colcombe, S., & Hahn, S. (2003). Age-related effects of attentional and oculomotor capture by onsets and color singletons as a function of experience. *Acta Psychologica*, 113, 205-225.
- Peterson, M., Kramer, A. F., Irwin, D. E., & **Hahn, S.** (2002). Modulating of oculomotor capture by abrupt onsets during attentionally demanding visual search. *Visual Cognition*, *9*, 755-791.
- Kramer, A. F., Hahn, S., McAuley, E., Cohen, N., Banich, M., Harrison, C., Chason, J., Boileau, R.A., Bardell, L., Colcombe, A., & Vakil, E. (2001). Exercise, Aging and Cognition: Healthy body, healthy mind? In W. A. Rogers & A. D. Fisk (Eds.), Human factors interventions for the health care of older adults (pp. 91-120). NJ: Erlbaum.
- Kramer, A. F., Cassavaugh, N. D., Irwin, D. E., Peterson, M. S., & Hahn, S. (2001). Influence of single and multiple onset distractors on visual search for singleton targets. *Perception and Psychophysics*, 63, 952-968.

- Kramer, A. F., **Hahn, S.**, Irwin, D. E., & Theeuwes, J. (2000). Age differences in the control of looking behavior: Do you know where your eyes have been? *Psychological Science, 3,* 210-217.
- Irwin, D., Colcombe, A., Kramer, A. F., & **Hahn, S.** (2000). Capture of eyes by color and onset singletons. *Vision Research*, 40, 1443-1458.
- Kramer, A. F., **Hahn, S.**, McAuley, E. (2000). Influence of Aerobic Fitness on the Neurocognitive Function of Older Adults. *Journal of Aging and Physical Activity, 8*, 379-385.
- Kramer, A. F., Hahn, S., Banich, M., Cohen, N., Colcombe, A., Bardell, L., Vakil, E., Chason, J., Harrison, C., & McAuley, E. (1999). Aging, fitness, and neurocognitive function. *Nature*, 400, 418-419.
- Kramer, A. F., **Hahn, S.**, Irwin, D. E., & Theeuwes, J. (1999). Attentional capture and aging: Implications for visual search performance and oculomotor control. *Psychology and Aging*, *14*, 135-154.
- Theeuwes, J., Kramer, A. F., **Hahn, S.**, Irwin, D. E., & Zelinsky, G. (1999). Influence of attentional capture on oculomotor control. *Journal of Experimental Psychology: Human Perception and Performance, 25,* 1595–1608.
- Kramer, A. F., **Hahn, S.**, & Gopher, D. (1999). Coordinative executive processes during task switching. *Acta Psychologica*. *101*, 339-378.
- **Hahn, S.**, & Kramer, A. F. (1998). Further evidence of division of attention over noncontiguous visual field. *Visual Cognition*, *5*, 217-256.
- Theeuwes, J., Kramer, A. F., **Hahn, S.**, & Irwin, D. E. (1998). Our eyes do not always go where we want them to go: capture of the eyes by new objects. *Psychological Science*, *9*, 379-385.
- **Hahn, S.**, Kramer, A. F., & Gopher, D. (1997). Aging and executive control. Proceedings of the 41st Annual Meeting on Human Factors and Ergonomics Society, Albuquerque, New Mexico.
- **Hahn, S.**, & Kramer, A. F. (1995). Attentional flexibility and aging: You don't need to be 20 years of age to split the beam. *Psychology and Aging, 10,* 597-609.
- Kramer, A. F., & **Hahn, S.** (1995). Splitting the beam: Division of attention over noncontiguous locations of the visual field. *Psychological Science*, *6*, 381-386.

GRANTS

- **Principal Investigator,** AI-based mental health diagnosis and management, Seoul Business Agency Post-Corona R&D Program, 12/01/2020-11/30/2021,
- Principal Investigator, Developing AI-based service platform for psychological diagnosis and management, Ministry of SMEs and Startups, 12/01/2020-11/30/2021
- **Co- Principal Investigator,** IoT and big data-based smart architecture technology: Computer-based communication environment and interface design, *Seoul National University*, 8/1/2019-7/31/2021
- Principal Investigator Development of Immersive Tourism Technology
 Utilizing 4D Technology and Affective Modeling. Korean Institute of Culture and Tourism, 5/1/2018~12/31/2019

- Principal Investigator, Assessing Perceptual/Cognitive/Psychomotor Ability of Older Adults to Develop Interface Design, Seoul National University, 5/19/2016-5/18/2017
- **Principal Investigator** Trust in autonomous vehicle: Empirical studies with interdisciplinary perspectives. *Korean Psychological Association*. 3/1/2018-8/31/2018
- **Principal Investigator,** Emotion and Visual Information Processing, *Seoul National University*, 3/2/2015-2016
- **Principal Investigator,** Emotion and Saccadic Eye Movement Control, *College of Arts & Sciences, University of Oklahoma,* 2006
- **Principal Investigator,** Facial Expression, Emotion, and Attention, Junior Faculty Summer Research Fellowship, *University of Oklahoma*, 2004
- **Principal Investigator,** Inhibition of Action, *Research Council Grant*, University of Oklahoma, 2003
- **Principal Investigator,** The Role of Temperament on Attention and Eye Movement, Junior Faculty Sumer Research Fellowship, *University of Oklahoma*, 2002