

SOWON HAHN, Ph.D.

Department of Psychology • Seoul National University • Seoul, Korea

Email: swahn@snu.ac.kr • Phone: +82 10 2731 4589

PROFESSIONAL PROFILE

- **Professor**, 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

- Human Cognition, Affective Science, Emotion Modeling, Smart Aging, Human Factors, Human-Robot Interaction

TEACHING EXPERIENCE

SNU Courses (2015~Present)

- | | |
|------------------------------|-----------------------------|
| • Introduction to Psychology | • Engineering Psychology |
| • Brain-Mind-Behavior | • Attention and Performance |
| • Cognitive Psychology | • Applied Cognition |
| • Affective Neuroscience | • Consciousness |

OU Courses (2001~2014)

- | | |
|-------------------------------|-----------------------------|
| • Cognitive Psychology | • Human Factors |
| • Sensation and Perception | • Attention and Performance |
| • Research Methods | • Cognitive Neuroscience |
| • Adult Development and Aging | • Affective Science |

PROFESSIONAL SERVICE

- **Associate Director**, Center for Sports Development & Promotion, SNU, 2019 to Present
- **Director**, Center for Psychological Sciences, SNU, 2017 to Present

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

PUBLICATIONS

- **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 Composition According to Smart Phone Proficiency in Korean Elderly, *Medicine & Science in Sports & Exercise*, 50(5S), 302.
- 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, S., **Hahn, S.**, Lee, T., & Jun, M. (2018). Two factor model of consumer satisfaction: International tourism research. *Tourism Management*, 67, 82-88.
- **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

- **Co-Investigator**, Development of AI-based Service Platform for Psychological Self-Test and Management. *Korean Ministry of SMEs and Startups*, 2019~2020
- **Principal Investigator**, Development of Immersive Tourism Technology Utilizing 4D Technology and Affective Modeling. *Korean Institute of Culture and Tourism*, 2018~2019
- **Principal Investigator**, Trust in autonomous vehicle: Empirical studies with interdisciplinary perspectives. *Korean Psychological Association*. 2018
- **Principal Investigator**, Assessing Perceptual/Cognitive/Psychomotor Ability of Older Adults to Develop Interface Design, *Seoul National University*, 2016-2017
- **Principal Investigator**, Emotion and Visual Information Processing, *Seoul National University*, 2015-2016
- **Principal Investigator**, Aging and Technology, *College of Arts & Sciences, University of Oklahoma*, 2012
- **Co-Investigator**, Brain Function Reorganization From Tumor Invasion and Radiotherapy: A Pilot fMRI Study. *Presbyterian Health Foundation*, 2006
- **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 Summer Research Fellowship, *University of Oklahoma*, 2002
- **Principal Investigator**, Aging and Decision Making, College of Arts & Sciences, University of Oklahoma, 2002

CONFERENCE PRESENTATIONS AND INVITED TALKS

- **Hahn, S.**, Kwon, H., Ryu, J., Lee, Y., Kwon, M., & Bang, H. (2018). Trust in Autonomous vehicle: Empirical study with interdisciplinary perspectives. *Annual Conference of Korean Psychological Association 2018*, 8, 86.
- 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.
- Bang, H., Lee, Y., Lee, J., & **Hahn, S.** (2018). Effects of motivation on task performance and choice of task demand. *Poster presented for the 59th Annual Meeting of the Psychonomic Society*. November 15-18. New Orleans, LA.
- Kwon, M., Rhee, Y., & **Hahn, S.** (2018). Differential influence of integral affect and incidental affect on attractiveness judgment of a gambling task. *Poster presented for the 59th Annual Meeting of the Psychonomic Society*. November 15-18. New Orleans, LA.
- **Hahn, S.**, Kim, T., Kwon, D., & Lee, Y. (2017). Aging and technology efficacy. *Poster presented for the 58th Annual Meeting of the Psychonomic Society*. November 9-12. Vancouver, British Columbia, Canada.
- Kwon, D., & **Hahn, S.** (2016). The Effect of Cross-Modal Emotional Priming. *Poster presented for the 57th Annual Meeting of the Psychonomic Society*. November 17-20. Boston, MA.
- Kim, T., & **Hahn, S.** (2016). The Role of Perceptual Salience in Affective Conditioning. *Poster presented for the 57th Annual Meeting of the Psychonomic Society*. November 17-20. Boston, MA.
- **Hahn, S.**, & Buttaccio, D. R. (2015). Age Differences in Associative Learning to Guide Conditional Visual Search. *Poster presented for the 56th Annual Meeting of the Psychonomic Society*, November 19-22. Chicago, IL.
- Huffman, W. B., & **Hahn, S.** (2014). The effect of modality and retrieval practice in foreign language learning. *Poster presented for the 55th Annual Meeting of the Psychonomic Society*, November 20-23. Long Beach, CA.
- **Hahn, S.**, Buttaccio, D. R., & Hahn, J. (2013). Personality predicts attentional performance during a change detection task. *Poster presented for the 52nd Annual Meeting of the Psychonomic Society*, November 14-17. Toronto, Canada.
- Buttaccio, D. R., **Hahn, S.**, Brand, E., & Huffman, W. (2013). Aging and Probabilistic Visual Search. *Poster presented for the 52nd Annual Meeting of the Psychonomic Society*, November 14-17. Toronto, Canada.
- **Hahn, S.** (2013). The effect of behavioral response of affective evaluation.

Mind, Brain, and Cognitive Psychology. Korea University. August 1-8. Seoul, Korea.

- **Hahn, S.** (2013). Emotion and action. *Invited Colloquium for the Psychology Department of Yeonsei University. August 9. Seoul, Korea.*
- **Hahn, S.,** & Buttaccio, D. R. (2012). After effects of action on selection: Attentional bias towards an acted upon object. *Paper presented for the 53rd Annual Meeting for the Psychonomic Society, November. 15-18. Minneapolis, MN.*
- Buttaccio, D. R., Lange, N., Thomas, R., **Hahn, S.,** & Dougherty, M. R. (2012). Hypothesis generation supports visual search: The influence of alternative outcomes and working memory capacity. *Poster presented for the 53rd Annual Meeting for the Psychonomic Society, November. 15-18. Minneapolis, MN.*
- Buttaccio, D. R., **Hahn, S.,** & Lange, N. D. (2011). Hypothesis Generation in a Probabilistic Visual Search Task. *Poster presented for the 52nd Annual Meeting for the Psychonomic Society, November 3-6. Seattle, WA.*
- Buttaccio, D. R., & **Hahn, S.** (2011). Visual search in a probabilistic context. *Paper presented at the annual meeting of the Oklahoma Judgment and Decision Making Conference, Oklahoma City, OK.*
- **Hahn, S.** & Buttaccio, D. R. (2010). Top-down influence of action on visual search. *Paper presented for the 51st Annual Meeting for the Psychonomic Society, November 18-21. St. Louis, MO.*
- Buttaccio, D. R., & **Hahn, S.** (2010). The effect of behavioral response on affective evaluation. *Poster presented for the 51st Annual Meeting for the Psychonomic Society, November 18-21. St. Louis, MO.*
- 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. *Paper presented as the MSS Missile Defense Sensors, Environment and Algorithms, Oct. Orlando, FL.*
- Buttaccio, D. R., & **Hahn, S.** (2009). Influence of Attention and Action on Affective evaluation of novel stimuli. *Poster presented for the 50th Annual Meeting of the Psychonomic Society, November 19-22. Boston, MA.*
- Lorat, T., & **Hahn, S.** (2008). Working memory and attention. *Poster presented for the 49th Annual Meeting of the Psychonomic Society, November 13-16. Chicago, IL.*
- Buttaccio, D., & **Hahn, S.** (2008). Attention, preference, and action. *Poster presented for the Southwestern Cognition Conference, October 24-25. El Paso, TX,*
- Lorat, T., & **Hahn, S.** (2008). Working memory and attention. *Poster presented for the Southwestern Cognition Conference, October 24-25. El Paso, TX,*
- **Hahn, S.** (2008). Action-based attention: Angry faces are detected faster but not more approachable. *Paper presented for the Interdisciplinary Conference on Human Performance, March 28-29, Orlando, Florida.*
- **Hahn, S.,** Nguyen, E., Lorat, T., & Jeon, A. (2006). Angry face is detected faster but not approachable. *Paper presented for the 47th Annual Meeting of the Psychonomic Society. Houston, TX. November 16-19.*
- **Hahn, S.,** Nguyen, E., Lorat, T., & Jeon, A. (2006). Visual search for facial expressions. *Paper presented for the Southwest Conference on Cognition. Lubbock, TX. October 20-21.*

- Lorat, T., Nguyen, E., & **Hahn, S.** (2006). Age influences on covert and overt attentional control to facial expressions. *Poster presented for the Cognitive Aging Conference*, Atlanta, GA. April 20-23.
- **Hahn, S.** (2004). Attentional guidance by emotionally valenced stimuli. *Invited Talk for the Psychology Department, University of Virginia*, July 23.
- **Hahn, S.** (2004). Facial Expression, Attention and Aging. *Poster presented for the Vision Science Society Meeting*, Sarasota, FL. April 29-May 5.
- **Hahn, S.**, & Andersen, G. J. (2002). Aging and multi-dimensional set switching. *Paper presented for the Cognitive Aging Conference*, Atlanta, GA. April 19-22.
- **Hahn, S.** (2002). Effects of sequence on task switching. *Poster presented for the 43rd Annual Meeting for Psychonomic Society*, Kansas City, MO, November 21-24.
- **Hahn, S.** (2002). Executive control of the task set preparation. *Paper presented for the Southwest Conference on Cognition*, San Antonio, Texas. October 25-26.
- Sauer, C., Andersen, G. J., Saidpour, A. & **Hahn, S.** (2001). Dual-task performance in driving: Steering and collision detection. *Paper presented for the 9th International Conference on Vision in Vehicles*, Brisbane, Australia.
- **Hahn, S.**, & Andersen, G. J. (2000). Response modality switching and aging. *Paper presented for the 8th Cognitive Aging Conference*, Atlanta, GA.
- Andersen, G. J. & **Hahn, S.** (2000). Priming of Action-based visual pathway. *Poster presented for the Annual Meeting on Association for Research in Vision and Ophthalmology*, Fort Lauderdale, Florida.
- **Hahn, S.**, & Andersen, G. J. (1999). High-level processing constraints in perception and action streams. *Poster presented for the 40th Annual Meeting of the Psychonomics Society*, Los Angeles, California.
- Kramer, A. F., **Hahn, S.**, & Irwin, D. (1999). Oculomotor capture and aging. *Paper presented for the 40th Annual Meeting of the Psychonomics Society*, Los Angeles, California.
- Peterson, M. S., Kramer, A. F., Irwin, D., & **Hahn, S.** (1999). Oculomotor capture by sudden onsets during visual search. *Poster presented for the 40th Annual Meeting of the Psychonomics Society*, Los Angeles, California.
- **Hahn, S.**, Kramer, A. F., De Jong, R., Gopher, D., Minear, M., & Glass, A. (1998). Aging and executive control in task switching. *Poster presented for the 7th Cognitive Aging Conference*, Atlanta, Georgia.
- Kramer, A. F., **Hahn, S.**, Banich, M., Cohen, N., McAuley, E., Bardell, L., Harrison, C., Chason, J., Vakil, Prioux, H., Glass, A., Minear, M., & Nash, C. (1998). Influence of aerobic fitness on the neurocognitive function of sedentary older adults. *Poster presented for the 7th Cognitive Aging Conference*, Atlanta, Georgia.
- Kramer, A. F., Irwin, D., **Hahn, S.**, Theeuwes, J., Glass, A. & Minear, M. (1998). Oculomotor control and attention: Inhibiting eye movements to task irrelevant objects. *Poster presented for the 7th Cognitive Aging Conference*, Atlanta, Georgia.
- Kramer, A. F., **Hahn, S.**, Irwin, D., & Theeuwes, J. (1998). Attentional capture and oculomotor control. *Advanced Displays and Interactive Displays. Paper presented for the 2nd Annual ARL Federated Laboratory Symposium*, College Park, MD.
- Theeuwes, J., Kramer, A. F., **Hahn, S.**, Irwin, D., & Zelinsky, G. (1997).

Influence of attentional capture on oculomotor control. *Paper presented for the 38th Annual Meeting of the Psychonomics Society*, Philadelphia, Pennsylvania.

- Theeuwes, J., Kramer, A. F., **Hahn, S.**, Irwin, D., & Zelinsky, G. (1997). Effect of the appearance of a new object on oculomotor control. *Poster presented for the Annual Meeting on Association for Research in Vision and Ophthalmology*, Fort Lauderdale, Florida.
- Kramer, A. F., & **Hahn, S.** (1994). Distribution of attention in noncontiguous space. *Paper presented for the 35th Annual Meeting of the Psychonomics Society*, St. Louis, MO.
- **Hahn, S.**, & Kramer, A. F. (1994). Attention to noncontiguous locations. *Poster presented for the Converging Operations in the Study of Visual Selective Attention*, Urbana-Champaign, Illinois.