**Anne McClure Walk**

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#### **Education**

August 2014 PhD in Experimental Psychology: Cognitive Neuroscience, Saint Louis University

Honors: Dissertation Research Fellowship

Cum GPA: 4.0/4.0

Dissertation: The Effects of Auditory and Language Experience on Tasks of Sequential and Spatial Learning

Supervisor: Christopher M. Conway

July 2009 Master of Arts in Clinical Psychology, Eastern Illinois University

Honors: Inter-departmental research assistantship

Cum GPA: 4.0/4.0

Thesis: The Effect of Visual Magnification and Reduction on Perceived Hand Size

Supervisor: Morton A. Heller

May 2007 Bachelor of Arts in Psychology, Eastern Illinois University

Honors: Dean’s list, University and Departmental honors programs

Cum GPA: 3.91/4.0

Major GPA: 4.0/4.0

Undergraduate Honors Thesis: The Effect of Instruction on Creativity in Writing

Supervisor: Morton A. Heller

#### **Awards and Fellowships**

March 2015 Olsen Award for Distinguished Dissertation Research

Saint Louis University

May 2012 University Dissertation Fellowship

Saint Louis University

April 2012 Saint Louis University Graduate Student Association 18th Annual Research Symposium Award (2nd Place)

Project Title: ERP Evidence for Different Sequence Learning Mechanisms in Children and Adults

April 2009 Distinguished Graduate Student Award

Eastern Illinois University

April 2007 Fred L. Yaffe Award

Eastern Illinois University

April 2006 Donald A. and Marie Rothschild Award

Eastern Illinois University

#### **Positions Held**

Aug 2016- present Postdoctoral Scholar, University of Illinois at Urbana-Champaign

**Duties include:** Processing and analyzing electro-physiological data, presenting at national conferences, preparing manuscripts for publication, interpreting and analyzing behavioral and body composition data, preparing future studies

Aug 2015- July 2016 Postdoctoral Scholar, University of Illinois at Urbana-Champaign

**Duties include**: processing and analyzing electro-physiological data, writing scientific manuscripts for publication, presenting research at professional conferences, generating research questions for future study

PI: Charles Hillman, Neurocognitive Kinesiology Laboratory

Aug 2014-Nov 2014 Visiting Scholar, University of Illinois at Urbana- Champaign

**Duties included:** assisting in laying the groundwork for new ERP investigations into sequence processing in atypically developing children

PI: Matthew Dye

Aug 2013-Present Psychology Faculty, Eastern Illinois University

**Duties included:** lecture preparation and delivery, use of active learning strategies, Socratic teaching methods, designing effective tools for student assessment, grading, course data management, regular meetings with students, adherence to office hours.

May 2012-May2013 University Dissertation Fellow, Saint Louis University

**Duties included:** developing research projects, administering electrophysiological tests, analyzing behavioral and electrophysiological data, preparing manuscripts, training undergraduate students on ERP administration.

Aug 2012- Dec 2012 Adjunct Instructor, Lakeland College

**Duties included:** course development, lecture preparation, development and use of active learning strategies, designing effective tools for student assessment, grading, course data management, regular meetings with students.

Aug 2009- May2012 Graduate Teaching/Research Assistant, Saint Louis University

**Teaching duties included**: adjunct teaching, guest lecturing, running test review sessions, course data management, supervising undergraduate research projects, creating course materials.

**Brain Learning and Cognition Lab, research duties include**: administering behavioral and electrophysiological tests, analyzing and interpreting data, developing and implementing research projects, preparing manuscripts.

Aug 2008- May2009 Graduate Assistant, The Human Resources Center of Clark and Edgar Counties

**Duties included**: providing therapy and case management services to individuals with a variety of mental health treatment needs.

May 2007-May 2008 Graduate Research Assistant, Eastern Illinois University

**Duties included**: analyzing data, testing participants for numerous studies, generating research ideas, proof-reading and preparing manuscripts for print, assisting with grading and record keeping.

#### **Teaching Experience**

2013-2015 Psychology Faculty, Eastern Illinois University

**Course:** PSY 2610 Statistics for Behavioral Science

**Topics:** descriptive and inferential statistics, measures of central tendency, t-tests, analysis of variance, correlation, regression

**Class Size:** 20-25 students, freshman-senior level

**Average Rating:** 4.6/5.0

**Course:** PSY 3515 Child Psychology

**Topics:** theories of child development, prenatal development, physical growth and health, emotional development, attachment, language acquisition, cognitive development, family

**Class Size:** 40 students

**Average Rating:** 4.6/5.0

**Course:** PSY 3680 Sensation and Perception

**Topics:** principles and history of psychophysics, science of vision, biology of the eye, cell structure of the retina, Gestalt principles, theories of object recognition, science of hearing, olfaction, and gustation, pain perception

**Class Size:** 45-65 students, sophomore-senior level

**Average Rating:** 4.8/5.0

**Course:** PSY 3805 Research Methods in Psychology

**Topics:** research design, generating research ideas, statistical analysis, within-subjects and between-subjects designs, effective data presentation, interpreting results, research ethics

**Class size:** 22 students, junior-senior level

**Average Rating:** 4.9/5.0

**Course:** PSY 3820 Cognitive Neuroscience

**Topics:** history of cognitive neuroscience, functional frameworks, connectionism, neural architecture, brain imaging techniques, neuroscience of vision and audition, neuroscience of language, neuroscience of attention and memory, neural development

**Class size:** 13 students, senior level

**Average Rating:** 4.7/5.0

Fall 2012 Adjunct Faculty, Lakeland College

**Course:** PSY 271 Introductory Psychology

**Topics:** introductory research methods, biological psychology, sensation and perception, memory and consciousness, emotions, developmental psychology, social psychology

**Class size:** 25 students, freshman-sophomore level

**Average Rating:** 4.7/5.0

**Course:** PSY 279 Lifespan Development

**Topics:** physical growth, cognitive development, memory, intelligence, emotional development, personality, families, death and dying

**Class size:** 17 students, freshman-sophomore level

**Average Rating:** 4.8/5.0

Fall 2011 Adjunct Faculty, Saint Louis University

**Course**: PSY 321 Developmental Psychology: Child

**Topics:** prenatal development, neural development, intelligence, academic success, language acquisition, gender identity, family relationships, development of the self

**Class size**: 45 students, sophomore-senior level

**Teacher Effectiveness Rating:** 4.7/5

Fall 2011 Teaching Assistant, Saint Louis University

**Course:**  PSY 488 Electrophysiology of the Mind

Spring 2010 Center for Teaching Excellence Certificate

**Skills acquired**: Revising teaching philosophy, attending workshops on numerous teaching related topics, designing course syllabi, developing lesson plans.

Spring 2010 Teaching Assistant, Saint Louis University

**Course:** PSY 471 Language and the Brain

April 2010 Guest Lecture for Christopher Conway, Cognitive Psychology (Undergraduate)

**Topic**: Logic and Decision Making

November 2009 Guest Lecture for Ron Kellogg, Cognitive Psychology (Undergraduate)

**Topic**: Artificial Grammar Learning Paradigm and Language Learning

Fall 2009 Teaching of Psychology (PSY 600)

**Skills acquired**: organizing syllabi, developing active learning strategies, designing supplements to traditional lectures, writing teaching philosophy, reflecting on teaching experiences, giving and receiving feedback on teaching

#### **Publications**

**Walk, A.M.** & Conway, C.M. (2016). Cross-Domain Statistical-Sequential Dependencies are Difficult to Learn. *Frontiers in Psychology,* 7(250).

**Walk, A.M.,** Matsuo, H., & Giovanoni, A. (2015). Preschool predictors of kindergarten language outcomes. *IAFOR Journal of Education, 3*(1), 132-149.

Conway, C.M., Deocampo, J., **Walk, A.M.**, Anaya, E.M., & Pisoni, D.B. (2014). Deaf children with cochlear implants do not appear to use sentence context to help recognize spoken words. *Journal of Speech, Language, and Hearing Research, 57(6),* 2174-2190. Doi:10.1044/2014\_JSLHR-L-13-0236.

Jost, E., Conway, C.M, Purdy, J.D., **Walk, A.M.**, & Hendricks, M.A. (2015). Exploring the neurodevelopment of visual statistical learning using event-related brain potentials. *Brain Research, 1597,* 95-107. doi: 10.1016/j.brainres.2014.10.017.

**Walk, A.M.** &Conway, C.M. (in press). Implicit statistical learning and language acquisition: Experience dependent constraints on learning. P. Rebuschat (Ed.), *Implicit and Explicit Learning of Languages,* (pp. 191-212). Philadelphia, PA: John Benjamins.

**Walk, A.M.** & Heller, M.A. (2014). The effect of visual magnification and reduction on hand size judgment, *Attention, Perception, and Psychophysics, 76* (4), 1045-1056.

**Walk, A.M.** & Conway, C.M. (2013). Two distinct sequence learning mechanisms for syntax acquisition and word learning. Invited chapter to appear in G. Hollich & L. Gogate (Eds.), *Theoretical and Computational Models of Word Learning: Trends in Psychology and Artificial Intelligence.* XX: IGI Global.

#### Conway, C.M., Gremp, M.A., **Walk, A.M.**, Bauernschmidt, A., & Pisoni, D.B. (2012). Can we enhance domain-general learning abilities to improve language function? Invited chapter to appear in P. Rebuschat & J. Williams (Eds.), Statistical Learning and Language Acquisition. Mouton de Gruyter.

#### Heller, M. A., & **Walk, A. M.** (2011). Touch in people who are visually impaired. In M. Hertenstein & S. Weiss (Eds.). Handbook of touch. New York: Springer.

#### **Walk, A.M.** & Conway, C.M. (2011). Multisensory statistical learning: Can cross-modal associations be acquired? In L. Carlson, C. Hoelscher, & T.F. Shipley. (Eds.), Proceedings of the 33rd Annual Conference of the Cognitive Sciences Society (pp. 3337-3342). Austin, TX: Cognitive Science Society.

#### Heller, M.A., **Walk, A.M**., Schnarr, R.E., Kibble, S., Litwiller, B., & Ambuehl, C. (2010). Attenuating the haptic horizontal-vertical curvature illusion. *Attention, Perception, and Psychophysics, 72(6),* 1626-1641.

#### Heller, M.A., Jones, M., **Walk, A.M.**, Schnarr, R.E., Hasara, A.N., Litwiller, B. (2010). Sex differences in the haptic change task. *Journal of General Psychology, 137,* 49-62.

#### Heller, M.A., Riddle, T., Fulkerson, E., Wemple, L., **Walk, A M.**, Kranz, C., Guthrie, S., & Klaus, P. (2009). The influence of viewpoint and surface detail in blind and sighted people when matching pictures to complex objects. *Perception, 38,* 1234-1250.

#### Heller, M.A., Kappers, A.M.L., McCarthy, M., Clark, A., Riddle, T., Fulkerson, E., Wemple, L., **Walk, A. M.,** Basso, A., Wanek, C., & Russler, K. (2008). The effects of curvature on haptic judgments of extent in sighted and blind people. *Perception*, *37,* 816-840.

#### **Publications: Under Review**

#### Gremp, M.A., Conway, C.M. & **Walk, A.M.** (under review). Sequential memory and learning of visual patterns in children who are deaf or hard of hearing.

#### **Conference Presentations**

Singh S, **Walk AM**, & Conway CM. *Event-related potential correlates of children with dyslexia reveal visual statistical learning impairment.* Poster presented at: Society of Psychophysiological Research 56th Annual Meeting; 2016 Sept 21-25. Minneanapolis, MN.

**Walk AM**, Khan NA, McCorkle SM, Drollette ES, Raine LB, Kramer AF, Cohen NJ, Renzi LM, Hammond BR, and Hillman CH. (September 2016). The role of macular pigment optical density in children’s attentional control and academic achievement. Poster presented at: Society of Psychophysiological Research 56th Annual Meeting; 2016 Sept 21-25. Minneanapolis, MN.

**Walk, A.M.,** Raine, L.B., Cohen, N.J., Kramer, A.F., Hillman, C.H., & Khan, N.A. (May, 2016). *High-Fit Children Exhibit Greater Resilience to the Transient Effects of Sucralose on Cognitive Control.* Poster expected to be presented at the Annual College of Sports Medicine Annual Meeting, Boston, MA.

**Walk, A.M.** & Conway, C.M. (November, 2015). *Different Neural Mechanisms Underlie Sequential and Spatial Learning*. Poster to be presented at the Psychonomic Society Annual Convention, Chicago, IL.

**Walk, A.M.** & Conway, C.M. (November, 2013). *Electrophysiological correlates of sequence learning in children with developmental dyslexia.* Poster presented at the Psychonomic Society Annual Convention, Toronto, Ontario, Canada.

**Walk, A.M.** (April, 2013). *Neural correlates of sequence learning in children diagnosed with dyslexia and typically developing children.* Poster presented at the Saint Louis University Graduate Student Association 19th Annual Research Symposium, Saint Louis.

**Walk, A.M.** (April, 2012). *ERP evidence of different sequence learning mechanisms in children and adults.* Poster presented at the Saint Louis University Graduate Student Association 18th Annual Research Symposium, Saint Louis.

Conway, C.M., **Walk, A.M.,** Purdy, J.D., & Smith, G. (March, 2012). *ERP evidence for different sequential pattern-learning mechanisms in children and adults.* Poster presented at the Cognitive Neuroscience Society Annual Meeting, Chicago.

**Walk, A.M.** & Conway, C.M. (July, 2011*). Multisensory statistical learning: Can associations between perceptual categories be acquired?* Poster and paper presented at 33rd Annual Conference of the Cognitive Science Society, Boston.

**Walk, A.M.** & Heller, M.A. (November, 2010). *The Effect of Visual Reduction and Magnification: Size Estimates of Body and Non-body Objects*. Poster presented at the Psychonomic Society Annual Meeting, St. Louis.

Heller, M. A., Schnarr, R. Litwiller, B., Young, C., Smith, A., & **Walk, A**. (November, 2009). *The Visual and Haptic Horizontal-Vertical Curvature (Saint Louis Arch) Illusion.* Poster presented at the Psychonomic Society Annual Meeting, Boston.

Heller, M. A., Jones, M., **Walk, A. D. M**., Schnarr, R. E., & Hasara, A. (November, 2008). *Sex Differences in the Haptic Change Task.* Poster presented at the psychonomic Society Annual Meeting, Chicago.

**Walk, A.M.** & Heller, M.A. (October, 2008). *Gender Differences in the Haptic Change Task*. Presented at EIU Philanthropy Dinner, Charleston, IL.

Heller, M. A., Jones, M., **Walk, A. D. M.**, & Hasara, A. (June, 2008). *Gender Differences and the haptic change task.* Presented at Illinoisy Data Conference, Southern Illinois University Carbondale, IL.

Heller, M. A., **McClure, A. D.**, Kerr, M., E., Kibble, S., & Basso, A. (May, 2008).  *The horizontal-vertical illusion in tangible curves: Effects of bimanual exploration time.* Presented at the annual meetings of the MPA, Chicago.

Heller, M. A., **McClure, A. D.**, Kerr, M. E., Kibble, S., Russler, K., & Basso, A. (November, 2007). *The Haptic Horizontal-Vertical Curvature Illusion.*  Presented at the Annual Meetings of the Psychonomic Society, Long Beach, CA..

Heller, M. A., **McClure, A.**, Kerr, M., Basso, A., Wanek, C., Srivastava, S., Kibble, S., Russler, K., & Campbell, J. (June, 2007). *Haptic Judgments of extent involving curves in sighted and blind people.* Presented at Illinoisy Data conference, Bloomington, IL.

Heller, M. A., Wemple, L., J., Riddle, T., Fulkerson, E., Kranz, C., & **McClure, A. D**. (November, 2006). *Haptic viewpoint effects depend upon surface detail and visual experience*. Presented at the Annual Meetings of the Psychonomic Society, Houston.

#### **Other Scholarly Activities**

2016 Reviewer (ad hoc) for *Journal of Experimental Psychology: Learning, Memory, and Cognition*

2014 Reviewer (ad hoc) for *Perception.*

#### **Clinical Experience**

Aug 2008- May2009 Graduate Intern, Human Resources Center of Clark and Edgar Counties

**Duties included**: providing therapy and case management services to individuals with a variety of mental health treatment needs.