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#### Education

Ph.D Cognitive Psychology, Northwestern University, 2014 (Expected).

Adviser: William Revelle, Ph.D.

Dissertation: The Relation of Scientific Attitudes to Traits, Abilities, and Interests over Time.

M.S. Cognitive Psychology, Northwestern University, 2011.

Committee Members: Karl S. Rosengren, Ph.D. & David H. Uttal, Ph.D.

Thesis: The Effect of Psychological Essentialism on Understanding of Parent-Offspring Variability and Evolution.

B.A. Psychology and Spanish, University of Michigan, Ann Arbor, 2007.

Adviser: E. Margaret Evans, Ph.D.

Thesis: Informal Museum Learning: Analyzing the Use of Evolutionary Terms in Parent-Child Conversations.

Study Abroad: University of Salamanca, Salamanca, Spain, Summer 2006.

# **Employment**

Fellow
Insight Data Science
http://insightdatascience.com/

June, 2014 Palo Alto, CA

Ph.D. Student Northwestern University http://sapa-project.org/blog/ September, 2009 - Present Evanston, IL

Lead multiple projects assessing individual differences in traits, abilities, and interests and their association with vocational and educational outcomes.

Used structural equation modeling and item response theory to develop open-source surveys and items for assessing temperament and scientific interests.

Published analytical and methodological tutorials for researchers on sapa-project.org/blog.

Co-developed https://sapa-project.org using PHP, R, and MySQL. SAPA collects data from 40,000+ participants/year, which are then analyzed using R, visualized, and published.

Administered Linux server for sapa-project.org, which involved BASH scripting, vulnerability testing, MySQL optimization, etc.

Lab Manager
York University
http://www.yorku.ca/health/psyc/

October, 2007 - November, 2008 Toronto, ON

Oversaw lab budgets and finances of a \$1 Million National Institutes of Health grant as well as the purchase and development of lab technology.

#### Research Assistant

York University

October, 2007 - November, 2008 Toronto, ON

Designed and authored research studies and collected data on bilingual performance advantages on the task-switching paradigm and the effect of bilingualism on children with ADHD.

Analyzed multivariate ADHD participant data using SAS and R.

#### Research Assistant

April, 2007 - October, 2008

Ann Arbor, MI

Center for Human Growth and Development

http://www.chgd.umich.edu/

Interviewed elementary-school aged children in a museum setting.

Children's theories and misconceptions of biological trait inheritance, deep-time, and natural selection.

#### Research Assistant

January, 2006 - April, 2007

E. Margaret Evans, Ph.D

Ann Arbor, MI

Conducted research at a University preschool and the Explore Evolution exhibition.

#### Research Interests

Individual differences in traits, ability, and interests; Cognitive development, scientific literacy and attitudes, conceptual change.

# **Teaching Interests**

Statistics, Research Methods, Developmental Psychology, Cognitive Psychology, Personality Psychology.

# Work In Progress

French, J. A., Condon, D. M., Revelle, W. R., & Rosengren, K. S. (in prep). Exploring and validating scientific interests using traits, abilities, and interest.

French, J. A., Condon, D. M., Revelle, W. R., & Rosengren, K. S. (in prep). Psychometric properties of the scientific attitudes inventory - revised (SAI-II) with college students.

French, J. A., Tumuluru, S., & Rosengren, K. S. (submitted). The onset of grasping errors: The effects of age and temperament on grasping attempts at photographs.

French, J. A., Tumuluru, S., Walco, D. K., Hespos, S. J., Uttal, D. H., & Rosengren, K. S. (under review). Do 9-month-olds grasp the nature of photographs?

French, J. A., Herrmann, P. A., Rosengren, K. S., & Evans, E. M. (under review). The effect of psychological essentialism on an understanding of lifespan changes.

### **Publications**

Herrmann, P. A., French, J. A., & Rosengren, K. S. (2013). Essentialist reasoning and knowledge effects on biological reasoning in young children. *Merril-Palmer Quarterly*.

Rosengren, K. S., & French, J., (2012). Magical Thinking. To appear in M. Taylor (Ed.), *The Oxford Handbook of the Development of Imagination*. New York: Oxford University Press.

Tare, M., French, J., Frazier, B., Diamond, J., Evans, E. M. (2011). Explanatory parent-child conversation predominates at an evolution exhibit. *Science Education*, 95(4), 720-744.

### Reports

Evans, E. M., Kiss, A. B., Lane, J. D., Legare, C. H. & French, J. (2008). Children's natural science concepts. NSF Report: University of Michigan.

Evans, E. M., Hazel, A., Legare, C. & French, J. (2007). Children's understand of bird evolution: Object based, informal learning. NSF Report: University of Michigan.

### Presentations

Hernandez, I. G., Jiang, M. J., French, J. A., & Rosengren, K. S. Cultural Influence on Endorsement of Causal and Recovery Explanations for Illness. 26th Annual Convention for the Association for Psychological Science. San Francisco, CA.

Elleman, L., Condon, D. M., French, J. A., & Revelle, W. (2014). *Personality Changes as a Function of Interests*. Fifteenth Annual Meeting of The Society for Personality and Social Psychology. Austin, TX.

Hernandez, I. G., Jiang, M. J., Chuong, X., French, J. A., Gutierrez, I. T., & Rosengren, K. S. (2013). *Culture's Influence on Parental Health Beliefs: An Exploration of Behavioral Endorsements*. Biennial Meeting of the Cognitive Development Society. Memphis, TN.

Condon, D. M., French, J. A., Brown, A., & Revelle, W. (June, 2013). Development and Validation of the International Cognitive Ability Resource. Association for Research in Personality Conference. Charlotte, NC.

French, J. A., Condon, D. M., Revelle, W., & Rosengren, K. S. (June, 2013). *Predicting Scientific Attitudes using Traits, Ability, and Interests*. Association for Research in Personality Conference. Charlotte, NC.

French, J. A., Condon, D. M., Revelle, W., & Rosengren, K. S. (June, 2013). *The Structure of Scientific Attitudes: Exploring the SAI-II using Traits, Abilities, and Interests.* 25th Annual Convention for the Association for Psychological Science. Washington, DC.

French, J. A., Tumuluru, S., Walco, D. K., Sozzer, F., & Rosengren, K. S. (June, 2012). Age Differences in Young Children's Attempts to Grasp Photos. International Conference on Infant Studies. Minneapolis, MN.

Walco, D. K., French, J. A., Tumuluru, S., Bruton, C., Brailas, N., Lee, C., Ackerman, D., Brailas, M., & Rosengren, K. S. (June, 2012). *Stability of Grasping Errors Over a Two-Month Time Period*. International Conference on Infant Studies. Minneapolis, MN.

Rhoad, A. M., Bruton, C. M., French, J. A., Gutierrez, I. T., & Rosengren, K. S. (May, 2012). *Evidence of Grasping Errors in Adults*. Annual Convention for the Association for Psychological Science. Chicago, IL.

French, J. A.. (March, 2012). Action Errors. Cognitive Area Brownbag, Northwestern University. Evanston, II.

French, J. A.. (April, 2011). *Children's Understanding of Lifespan Variability*. Cognitive Area Brownbag, Northwestern University. Evanston, IL.

French, J. A., Herrmann, P. A., & Rosengren, K. S. (April, 2011). *Impossible Frog: Examining Children's Essentialist Biases Using Metamorphosis*. Biennial Conference of the Society for Research in Child Development. Montreal, Canada.

Tumuluru, S., French, J. A., Schifmann, J., Walco, D., Sozzer, F., & Rosengren, K. S. (April, 2011). *Grasping Errors in Infants. Biennial Conference of the Society for Research in Child Development*. Montreal, Canada.

Rosengren, K. S., & French, J. (April, 2011). *Action Errors in Childhood: The Role of Representations and Inhibitory Control.* Presented at the symposium "Precursors and Correlates of Body Awareness in Preschoolers" at the Biennial Conference of the Society for Research in Child Development. Montreal, Canada.

Tare, M., Frazier, B., French, J., Evans, E. M., & Diamond, J. (April, 2009). *Parents' Scaffolding of Children's Learning at an Evolution Exhibition*. Presented in the symposium "Family Conversations in Museum Settings: How do They Contribute to Children's Science Learning?" at the Biennial Conference of the Society for Research in Child Development. Denver, CO.

Lane, J., Legare., C., French, J., Kiss, A., & Evans, E. M. (April, 2009). *Anthropomorphizing Nature: What Effect does it have on Understanding*. Biennial Conference of the Society for Research in Child Development. Denver, CO.

French, J., Tare, M., Frazier, B., Wolfgram, S., Evans, E. M., & Diamond, J. (October, 2007). *Informal Museum Learning: Analyzing The Use Of Evolutionary Terms In Parent-Child Conversations*. Biennial Meeting of the Cognitive Development Society. Santa Fe, NM.

Legare, C., Hazel, A., French, J., Witt, A., & Evans, E. M. (October, 2007). *Children's Understanding Of Evolution: Learning From Museum Exhibits About Natural Selection*. Biennial Meeting of the Cognitive Development Society. Santa Fe, NM.

French, J., Wolfgram, S., Tare, M., Frazier, B., & Evans, E. M. (April, 2007). *Informal Museum Learning: Analyzing The Use Of Evolutionary Terms In Parent-Child Conversations*. Annual Meeting of the Undergraduate Research Forum. Ann Arbor, MI.

### Released Software

French, J. A. & Condon, D. M. (2013). SAPATools: Software for analyzing the Synthetic Aperture for Personality Assessment. R package version 2013.12.26. URL http://sapa-project.org/r

French, J. A., Condon, D. M., & Revelle, W. (2012). ICAR: International Cognitive Ability Resource. R package version 0.1. URL http://www.icar-project.org

### Professional Activities

Ad hoc Reviewer for Child Development.

Ad hoc Reviewer for the Canadian Journal of Experimental Psychology.

Ad hoc Reviewer for Psychological Reports.

Ad hoc Reviewer for Developmental Psychology.

Ad hoc Reviewer for the Journal of Personality and Social Psychology.

Ad hoc Reviewer for the American Educational Research Journal.

# Honors, Awards, & Fellowships

Language and Cognition Interdisciplinary Fellowship, Northwestern University, 2012 - 2013.

Florence Sales Excellence in Teaching Fellowship, 2012.

Affiliate, Multidisciplinary Program in Education Sciences, Northwestern University, 2010 - Present.

Northwestern TGS Travel Grant, 2010, 2012, 2013.

University Fellowship, Northwestern University, 2009 - Present.

University Honors, University of Michigan, 2006 - 2007.

# Association Memberships

Association for Research in Personality, 2013 - Present.

Association for Psychological Science, 2012 - Present.

International Society on Infant Studies, 2012 - Present.

Cognitive Development Society, 2007 - Present.

Society for Research on Child Development, 2009 - Present.

Near-infrared Spectroscopy Club, 2011 - Present. Co-Organizer.

Multi-institution journal club that discusses Near-Infrared Spectroscopy articles and issues on a bi-weekly basis.

University of Massachusetts-Amherst, Northwestern University, SISSA.

### **Skills**

#### Language:

Conversant in Spanish.

#### Standardized Testing:

Kaufman Brief Intelligence Test, PPVT-IIIR, Wug test, Raven's Progressive Matrices, Wechsler Abbreviated Scale of Intelligence, Shipley Institute of Living Scale 2 & Cattell Culture Fair III.

#### Technical:

Statistical Analysis (R-Project, SPSS, SAS, SVM Machine Learning, Structural Equation Modeling, Item-Response Theory, Hierarchical Linear Modeling, Survey Methodology).

Experimental Frameworks (E-Prime, DirectRT, PsychoPY, SciPY).

Typesetting (IATEX, Adobe Acrobat Professional).

Database Management Software (Filemaker Pro, MySQL, PostgreSQL).

Web Frameworks (PHPBB3, Django, CSS 3.1, HTML5).

Linux/BSD/UNIX, Windows, & Mac.

### References

William Revelle, Professor, Northwestern University. Email: revelle@northwestern.edu

Karl S. Rosengren, Professor, Northwestern University. Email: k-rosengren@northwestern.edu

Paul Reber, Professor, Northwestern University. Email: p-reber@northwestern.edu

E. Margaret Evans, Associate Research Scientist, Center for Human Growth and Development. Email: evansem@umich.edu

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