Jacob J. Elder

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EDUCATION

Ph.D. | UNIVERSITY OF CALIFORNIA, RIVERSIDE CA   **Expected June 2023**
Social Psychology; Quantitative Minor
Advisor: Brent Hughes, Ph.D.

M.A. | UNIVERSITY OF CALIFORNIA, RIVERSIDE CA   **2020**
Social Psychology
Advisor: Brent Hughes, Ph.D.

B.A. | UNIVERSITY OF CALIFORNIA, LOS ANGELES CA   **2015**
Psychology, *Cum Laude, Departmental Honors*

EMPLOYMENT

UC Riverside GradQuant   **Summer 2022 – Current**
Quantitative Consultant
Supervisors: Jason Chou, M.A., Kevin Easterling, Ph.D. & Diogo Ferrari, Ph.D.

JK LIFESPAN DEVELOPMENT LAB, VIRGINIA TECH   **May 2016 – April 2018**
Research Coordinator
Supervisors: Jungmeen Kim-Spoon, Ph.D. & Brooks King-Casas, Ph.D.

HONORS AND AWARDS

Travel Grant for Princeton "Measuring Belief Systems in Network Communities" Conference	**Fall 2022**
Travel Grant for University of Michigan Training Course in fMRI	**Summer 2022**
HEERF Dissertation Year Fellowship - $7,200	**Winter 2022**
SPSP 2022 Graduate Travel Award - $500	**Fall 2021**
National Science Foundation Graduate Research Fellowship – Honorable Mention	**Winter 2020**
SPSP 2020 Graduate Travel Award - $500	**Fall 2019**
UC Research Provost Fellowship Award - $51,000	**Fall 2018**
Departmental Honors	**Spring 2015**
Cum Laude	**Spring 2015**
UCLA Dean's List	**2011 - 2015**

PUBLICATIONS
*indicates equal contributions

Published Articles

Derreumaux, Y., **Elder, J.,** Quimby, T., Suri, G., Ben-Zeev, A., & Hughes, B. (in press). Stereotypes disrupt probabilistic category learning. *Journal of Experimental Psychology: General.*

Elder, J., Cheung, B., Davis, T., & Hughes, B.L (in press). Mapping the Self: A network approach to understand behavioral and neural representations of self-concept structure. *Journal of Personality and Social Psychology.*

Elder, J., Davis, T., & Hughes, B. L. (2022). Learning About the Self: Motives for Coherence and Positivity Constrain Learning From Self-Relevant Social Feedback. *Psychological Science*, 09567976211045934.

Kim-Spoon, J., Herd, T., Brieant, A., **Elder, J.,** Lee, J., Deater-Deckard, K., & King-Casas, B. (2021). A 4-year longitudinal neuroimaging study of cognitive control using latent growth modeling: developmental changes and brain-behavior associations. *NeuroImage*, *237*, 118134.

Elder, J., Brieant, A., Lauharatanahirun, N., King-Casas, B., & Kim-Spoon, J. (2019). Insular risk processing predicts alcohol use via externalizing pathway in male adolescents. *Journal of Studies on Alcohol and Drugs*, *80*(6), 602-613.

Manuscripts Under Review

Elder, J.*, Derreumaux, Y.*, & Hughes, B.L (under review). Preference Falsification: How Social Conformity as an Interdependent, Recursive, and Multilevel Process Corrupts Public Knowledge.

Margolis, S., **Elder, J.,** Hughes, B., & Lyubomirsky, S. (under review). What Are the Most Important Predictors of Subjective Well-Being?: Insights Using Machine Learning and Linear Regression Approaches on the MIDUS Datasets.

Elder, J., Davis, T., & Hughes, B. (under review). A fluid self-concept: How the brain achieves a coherent and positive self-concept while incorporating social feedback

Elder, J.*, Wilson, L.*, & Calanchini, J. (under review). Estimating the reliability and stability of cognitive processes contributing to implicit attitudes.

Derreumaux, Y.*, **Elder, J.*,** & Hughes, B. (under review). The influence of group norms and affective polarization on expressed ideology.

Elder, J., Davis, T., & Hughes, B. (under review). Competing motivations in self-representation: People self-derogate to assimilate group norms.

Elder, J., Davis, T., & Hughes, B. (under review). Self-concept certainty and stability is associated with semantic structure among trait self-beliefs.

Manuscripts In Preparation

Elder, J., Cheung, B., Hopkins, J., Davis, T., & Hughes, B. (in prep). Positive information is more similar than negative information during self-referential processing: A repetition suppression study.

Elder, J., Davis, T., & Hughes, B. (in prep). When "I" Shifts to "We": Network modeling of identity-to-identity and identity-to-trait beliefs predicts personal self-views.

Elder, J., Davis, T., & Hughes, B. (in prep). The effect of identity threat on downstream self-views and connected social identities.

Elder, J., & Hughes, B. (in prep). Longitudinal changes in social identity network structure and social identification.

Elder, J., & Hughes, B. (in prep). New frontiers in self-concept malleability: Mathematical models of self- and identity-learning.

Elder, J., Davis, T., & Hughes, B. (in prep). Self-anchoring: Projecting the self onto ingroups via similarity-based inference

Elder, J., & Hughes, B. (in prep). Word embeddings reflect self-stereotyping

Elder, J., & Hughes, B. (in prep). Discourse in self-disclosure focused communities: Topic modeling of "self-referential" Reddit communities

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INVITED CONFERENCE TALKS & PRESENTATIONS
*indicates mentored undergraduate author

<u>Talks</u>

Elder, J., Davis, T., Hughes, B., (2022): *Propagation of Feedback in the Self-Concept: Semantic structure facilitates learning about the self from social feedback*. "Measuring Belief Systems in Networked Communities" Small Group Conference, Princeton, CA.

Elder, J. (2022): *Discussion of "Big Little Lies: A Compendium and Simulation of p-Hacking Strategies"*. UC Riverside Quantitative Proseminar, Riverside, CA.

Elder, J., Davis, T., Hughes, B., (2021): *Propagation of Feedback in the Self-Concept: Memory traces and error-based learning in ventromedial prefrontal cortex support self-concept coherence*. UC Riverside Social Psychology Proseminar, Riverside, CA.

Elder, J., Cheung, B., Davis, T., Hughes, B., (2021): *Mapping the self: A network approach to understand behavioral and neural representations of self-concept structure*. Social & Affective Neuroscience Society Convention, Santa Barbara, CA.

Elder, J. (2021): *The Fixed Effects Fallacy*. UC Riverside Quantitative Proseminar, Riverside, CA.

Elder, J., Cheung, B., Davis, T., Hughes, B., (2020): *Mapping the self: A network approach to understand neural representations of self-concept structure*. International Symposium for Networking in Neuroscience, Remote due to COVID-19.

Elder, J., Cheung, B., Davis, T., Hughes, B., (2020): *Mapping the self: A network approach to understand neural representations of self-concept structure*. UC Riverside Social Psychology Proseminar, Riverside, CA.

Elder, J., Cheung, B., Davis, T., Hughes, B., (2020): *Learning About the Self: Motivations for coherence and positivity bias learning from self-relevant feedback*. UC Riverside Social Psychology Proseminar, Riverside, CA.

<u>Posters</u>

Elder, J., Davis, T., & Hughes, B., (2022): *Competing Motives: How the motivation to evaluate oneself as like the group conflict with the motivation to view oneself positively.* Society for Personality and Social Psychology Convention, Atlanta, GA.

Elder, J., Davis, T., & Hughes, B., (2022): *Retrieval, Decisions, and Updates in the Self-Concept: Propagation of Feedback and Maintenance of Coherence in the Self-Concept.* Social and Affective Neuroscience Society Conference, Remote.

Elder, J., Davis, T., & Hughes, B., (2022): *Retrieval, Decisions, and Updates in the Self-Concept: Propagation of Feedback and Maintenance of Coherence in the Self-Concept.* Society for Personality and Social Psychology Convention, San Francisco, CA.

Elder, J., Davis, T., & Hughes, B., (2022): *Retrieval, Decisions, and Updates in the Self-Concept: Propagation of Feedback and Maintenance of Coherence in the Self-Concept.* Society for Personality and Social Psychology Convention, Social Cognition Preconference, San Francisco, CA.

Won, H.*, **Elder, J.**, & Hughes, B. (2021): *Moral emotions shape ensemble coding of faces*. UC Riverside Psychology Undergraduate Research Conference, Remote due to COVID-19.

Chen, C.*, Hanna, M.*, Derreuamaux, Y., **Elder, J.**, & Hughes, B. (2021): *Preference Falsification: Motivated misrepresentation of beliefs to outgroup political members*. UCLA Psychology Undergraduate Research Conference, Remote due to COVID-19.

Elder, J., Cheung, B., Davis, T., & Hughes, B., (2021): *Mapping the self: A network approach to understand behavioral and neural representations of self-concept structure*. Social & Affective Neuroscience Society Convention, Santa Barbara, CA.

Hopkins, J.*, **Elder, J**., Cheung, B., Davis, T., & Hughes, B., (2021): *Self- and semantic-related brain regions adapt to similarity within the self-concept*. Society for Personality and Social Psychology Convention, Remote poster due to COVID-19.

Elder, J., Cheung, B., Davis, T., & Hughes, B., (2021): *Learning About the Self: Neural mechanisms underlying malleability in self-views*. Society for Personality and Social Psychology Convention, Remote poster due to COVID-19.

Hopkins, J. R.*, **Elder, J**., & Hughes, B., (2020). *Individual Differences in Susceptibility to Self-Concept Change: Examining Inter-Individual Malleability of Self-Views as Reward-Based Learning.* Western Psychological Association Convention, San Francisco, CA.

Hopkins, J. R.*, Sohal, S.*, **Elder, J**., & Hughes, B., (2020). *Individual Differences in Susceptibility to Self-Concept Change: Examining Inter-Individual Malleability of Self-Views as Reward-Based Learning.* UCR R'Psych Undergraduate Psychology Conference, Remote due to COVID-19.

Elder, J., Cheung, B., Davis, T., & Hughes, B., (2020): *Mapping the self: A network approach to understand behavioral and neural representations of self-concept structure.* Society for Personality and Social Psychology Convention, New Orleans, LA.

Elder, J., Davis, T., & Hughes, B., (2020): *Learning about the self: A computational framework for understanding dynamic self-concept change*. Society for Personality and Social Psychology Convention, Self & Identity Preconference, New Orleans, LA.

Derreumaux, Y., **Elder, J.,** Quimby, T., Suri, G., Ben-Zeev, A., & Hughes, B. (2019): *Social Interference in Probabilistic Learning: Do non-diagnostic (task irrelevant) social stimuli interfere with categorical learning?* Society for Personality and Social Psychology Convention, New Orleans, LA.

Brieant, A., **Elder, J**., King-Casas, B., & Kim-Spoon, J. (2018) *Socioeconomic risk for adolescent executive function and emerging risk behaviors*. Society for Research on Adolescence Conference, Minneapolis, MN.

Peviani, K., Brieant, A., Holmes, C., **Elder, J**., Deacon, J., King-Casas, B., & Kim-Spoon, J. (2018) *Intergenerational Transmission of Substance Use: Contributions of Parents, Peers, and Religious Socialization*. Society for Research on Adolescence Conference, Minneapolis, MN.

Elder, J., Brieant, A., King-Casas, B., & Kim-Spoon, J. (2017). *Externalizing pathway of male adolescent substance use*. American Psychological Association Convention, Boston, MA

Elder, J., Capellino, Y., Castro-Moino, K., Zhang, Y., Tuvshin, S., Bell, A. N., & Goff, P. A. (2015). *Putting ourselves together: Intersectional health implications of gender expression*. Western Psychological Association Annual Convention, Las Vegas, NV

TEACHING EXPERIENCE

Average overall effectiveness rating (AOE) out of 7
*indicates graduate student course

GradQuant Statistics Bootcamp* *[Summer 2022]* – Instructor – AOE: n/a
Principles of Data Science* *[Winter 2022]* – Teaching Assistant – AOE: 6.71
Applied Longitudinal Data Analysis* *[Fall 2021]* – Teaching Assistant – AOE: 7
Statistical Procedures *[Summer 2021]* – Teaching Assistant – AOE: 7
Latent Variable Modeling* *[Spring 2021]* – Teaching Assistant – AOE: 6.27
Principles of Data Science* *[Winter 2021]* – Teaching Assistant – AOE: 6.60
Programming in R* *[Fall 2020]* – Teaching Assistant – AOE: 6.27
Introduction to Experimental Psychology *[Summer 2020]* – Teaching Assistant – AOE: n/a
Multinomial Processing Trees* *[Spring 2020]* – Teaching Assistant – AOE: n/a
Human Neuroimaging *[Winter 2020]* – Teaching Assistant – AOE: 5.85
Research Methods *[Fall 2019]* – Teaching Assistant – AOE: 5.82
Social Psychology *[Summer 2019]* – Teaching Assistant – AOE: n/a

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WORKSHOPS & SEMINARS

Neuromatch Academy: Deep Learning (2022). Remote
fMRI Summer Workshop (2022). Ann Arbor, Michigan. (Postponed from 2020 to 2022 due to COVID-19)
Agent-based Modelling of Political Polarization (2022). Bamberg, DE and Remote.
Summer School in Social Neuroscience & Neuroeconomics (2020). Durham, NC. (Accepted, canceled due to COVID-19)
Neurohackademy (2020). Remote. (Online due to COVID-19)

PEER REVIEWS

Editing

Personality and Social Psychology Review, Emerging Editor   **2022 - 2024**
UCLA Psychology Undergraduate Research Journal, Editor   **2013 - 2015**

Ad Hoc Reviews

Social Cognitive and Affective Neuroscience   **2022**

Frontiers in Neuroscience | **2021**

Assisted Reviews

British Journal of Social Psychology	**2022**
Journal of Experimental Social Psychology	**2021**
Psychological Science	**2020**
Social Cognitive and Affective Neuroscience	**2020**
Cerebral Cortex	**2020**
Cognition	**2019**

PROFESSIONAL AFFILIATIONS

Psi Chi
Association for Psychological Science
Society for Personality and Social Psychology
Social and Affective Neuroscience Society

UNDERGRADUATE MENTORING

Liana Willis – Poster
Haemi Won – Independent Project, Talk
Crystal Chen – Data Analysis, Writing, Poster
Matthew Hanna – Data Analysis, Writing, Poster
Farha Ahmed – Data Analysis, Writing
Kimberly Chen – Data Analysis
Julia Hopkins – Posters, Data Analysis, Independent Project
Simrit Sohan – Poster, Data Analysis

SKILLS

Computer Software:
MPlus; FSL; SPM; Freesurfer; R; Python; Stan; Bash; MATLAB; Word; Excel; Powerpoint; Zotero; Qualtrics; SurveyMonkey; Docker

Libraries:
Python: Numpy; Pandas; Matplotlib; Scikit Learn; Nilearn; Pytorch; Torchtext
R: tidyverse; lavaan; ggplot2; psych; lme4; caret; optimx; bayestest; rstanarm; brms

Methods:
Design: Survey research; Experimental design; Correlational; Neuroimaging; Simulation; Psychometrics
Frequentist Statistics: General Linear Model; Generalized Linear Model; Mixed Effects Models; Parametric and non-parametric data
Bayesian Statistics: MCMC; Hierarchical Bayesian Models; Bayesian regression
Latent variable modeling: Factor analysis; Structural equation modeling
Cognitive computational models: Reinforcement learning; Multinomial processing trees; network analysis; Model fitting and optimization
Exploratory Data Analysis: Dimensionality reduction (i.e., Canonical Correlation Analysis; Principal Component, Multidimensional Scaling); Agent-Based Modeling

Data Visualization: Scatterplots; Lineplots; Timeseries; Barplots; Predicted effects; Tables; Neuroimaging Statistical Maps
Machine Learning: Natural Language Processing; Cross-validation; Neural Networks; Unsupervised Learning
   (Hierarchical Clustering; K-Means)
Neuroimaging: Acquisition; Design; GLM; Functional Connectivity; Volumetric Analysis; Multivoxel Pattern Analysis
Efficiency: Parallelization; High-performance cluster; Batch processing; Object-oriented programming