

Nicholas T. Ichien

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Contact Information

502 Portola Plaza
Los Angeles, CA 90095
Phone: 626 823 7493
Email: ichien@ucla.edu

Education

May 2023 (expected)	Ph.D., University of California, Los Angeles (UCLA) Cognitive Psychology; Specialization in Computational Cognition
May 2019	M.A., University of California, Los Angeles (UCLA) Psychology
May 2016	M.Sc., London School of Economics and Political Science (LSE) Philosophy of the Social Sciences Dissertation: <i>An ameliorative conceptualization of psychiatric disorders</i>
May 2012	B.A., New York University (NYU) Psychology

Skills

- Programming
 - Matlab, Python, R
- Data analysis
 - Statistical modeling of behavioral data, simulation of behavioral data in cognitive computational models

Awards / Honors

2022	Dissertation Year Fellowship (\$20,000), UCLA
2019	Graduate Summer Research Mentorship Program (\$6,000), UCLA
2018, 2021	Edwin W. Pauley Fellowship (\$15,000), UCLA
2016	Distinction for dissertation, LSE
2012	Magna cum Laude, NYU
2012	Founder's Day Award, NYU
2009-2012	Dean's List, NYU

Publications

Peer-reviewed journal articles

- Ichien, N.**, Alfred, K. L., Baia, S., Kraemer, D. J. M., Holyoak, K. J., Bunge, S. A., & Lu, H. (under review). Relational and lexical similarity in analogical reasoning and recognition memory: Behavioral evidence and computational evaluation.
- Ichien, N.**, Liu, Q., Fu, S., Holyoak, K. J., Yuille, A. L., & Lu, H. (under review). Analogical reasoning with three-dimensional objects: A comparison of deep learning and compositional models.
- Stamenkovic, D., Milenkovic, K., **Ichien, N.**, & Holyoak, K. J. (in press). An individual-differences approach to poetic metaphor: Impact of aptness and familiarity. *Metaphor and Symbol*.
- Holyoak, K. J., **Ichien, N.**, & Lu, H. (2022). From semantic vectors to analogical mapping. *Current Directions in Psychological Science*
- Lu, H., **Ichien, N.**, & Holyoak, K. J. (2022). Probabilistic analogical mapping with semantic relation networks. *Psychological Review*.
- Ichien, N.**, Lu, H., & Holyoak, K. J. (2022). Predicting patterns of similarity among abstract semantic relations. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 48(1), 108–121.
- Stamenković, D., **Ichien, N.**, & Holyoak, K. J. (2020). Individual Differences in Comprehension of Contextualized Metaphors. *Metaphor and Symbol*, 35(4), 285-301.
- Kadambi, A., **Ichien, N.**, Qiu, S., & Lu, H. (2020). Understanding the visual perception of awkwardness: How greetings go awry. *Attention, Perception, & Psychophysics*. 82, 2544-2557.
- Ichien, N.**, Lu, H., & Holyoak, K. J. (2020). Verbal analogy problem sets: An inventory of testing materials. *Behavior Research Methods*. 52(5): 1803-1816.
- Peng, Y., **Ichien, N.**, & Lu, H. (2020). Causal actions enhance perception of continuous body movements. *Cognition*. 194, 104060.
- Stamenković, D., **Ichien, N.**, & Holyoak, K. J. (2019). Metaphor comprehension: An individual differences approach. *Journal of Memory and Language*. 105, 108-118.
- Telzer, E. H., **Ichien, N.**, & Qu, Y. (2015). Mothers know best: Redirecting adolescent reward sensitivity to promote safe behavior during risk taking. *Social Cognitive Affective Neuroscience*, 10, 1383 -1391.
- Telzer, E. H., **Ichien, N.**, & Qu, Y. (2015). The ties that bind: Group membership shapes the neural correlates of ingroup positivity. *NeuroImage*, 115, 42-51.

Peer-reviewed book chapters and conference proceedings papers

- Ichien, N.**, Kan, A.** & Holyoak, K. J., Lu, H., (2022). Generative inferences in relational and analogical reasoning: A comparison of computational models. *Proceedings of the 44th Annual Meeting of Cognitive Science Society*. Toronto, Canada: Cognitive Science Society.
- **advisee
- Ichien, N.**, Alfred, K. L., Baia, S. R., Kraemer, D. J. M., Bunge, S. A., Lu, H., & Holyoak, K. J. (2022). Relation representations in analogical reasoning and recognition memory. *Proceedings of the 44th Annual Meeting of Cognitive Science Society*. Toronto, Canada: Cognitive Science Society.

- Snefjella, B., **Ichien, N.**, Holyoak, K. J., & Lu, H. (2022). Predicting human judgments of relational similarity: A comparison of computational models based on vector representations of meaning. *Proceedings of the 44th Annual Meeting of Cognitive Science Society*. Toronto, Canada: Cognitive Science Society.
- Lindford, B., **Ichien, N.**, Holyoak, K. J., & Lu, H. (2022). Impact of semantic representations on analogical mapping with transitive relations. *Proceedings of the 44th Annual Meeting of Cognitive Science Society*. Toronto, Canada: Cognitive Science Society.
- Ichien, N.**, & Cheng, P. (2022). Revisiting Hume in the 21st century: How forming generalizable causal beliefs is possible when causal relations are inherently unobservable. In A. Wiegmann & P. Willemsen (Eds.), *Advances in Experimental Philosophy of Causation*, London, UK: Bloomsbury Press.
- Ichien, N.***, Liu, Q.*, Fu, S., Holyoak, K. J., Yuille, A., & Lu, H. (2021). Visual analogy: Deep learning versus compositional models. *Proceedings of the 43rd Annual Meeting of Cognitive Science Society*. Vienna, Austria: Cognitive Science Society.
- *equal author contribution
- Ichien, N.**, Lu, H., & Holyoak, K. J. (2019). Individual differences in judging similarity between semantic relations. *Proceedings of the 41st Annual Meeting of the Cognitive Science Society*. Montreal, Canada: Cognitive Science Society.
- Peng, Y., **Ichien, N.**, & Lu, H. (2019). Perception of continuous movements from causal actions. *Proceedings of the 41st Annual Meeting of the Cognitive Science Society*. Montreal, Canada: Cognitive Science Society.
- Lu, H., Liu, Q., **Ichien, N.**, Yuille, A., & Holyoak, K. J. (2019). Seeing the meaning: Vision meet semantics in solving pictorial analogy problems. *Proceedings of the 41st Annual Meeting of the Cognitive Science Society*. Montreal, Canada: Cognitive Science Society.

Conference Presentations

Talks

- Ichien, N.**, Kan, A.** & Holyoak, K. J., Lu, H., (2022, July). Generative inferences in relational and analogical reasoning: A comparison of computational models. Talk presented (by Ichien) at the Annual Meeting of Cognitive Science Society, Toronto, Canada.
- **advisee
- Ichien, N.**, Alfred, K. L., Baia, S. R., Kraemer, D. J. M., Bunge, S. A., Lu, H., & Holyoak, K. J. (2022, July). Relation representations in analogical reasoning and recognition memory. Talk presented (by Ichien) at the Annual Meeting of Cognitive Science Society, Toronto, Canada.
- Lu, H., **Ichien, N.**, & Holyoak, K.J., (2020, November). Representing abstract semantic relations in minds, brains, and machines. Talk presented (by Holyoak) at the AAAI Fall Symposium, "Conceptual Abstraction and Analogy in Natural and Artificial Systems", online.
- Ichien, N.**, Lu, H., & Holyoak, K.J. (2019, July). Individual differences in judging similarity between semantic relations. Talk presented (by Ichien) at the Annual Conference of the Cognitive Science Society, Montreal, Canada.

Posters

- Snefjella, B., **Ichien, N.**, Holyoak, K. J., & Lu, H. (2022, July). Predicting human judgments of relational similarity: A comparison of computational models based

- on vector representations of meaning. Poster presented (by Snefjella) at the Annual Meeting of Cognitive Science Society. Toronto, Canada.
- Lindford, B., **Ichien, N.**, Holyoak, K. J., & Lu, H. (2022, July). Impact of semantic representations on analogical mapping with transitive relations. Poster presented (by Lindford) at the Annual Meeting of Cognitive Science Society. Toronto, Canada.
- Ichien, N.**, Alfred, K. L., Baia, S. R., Kraemer, D. J. M., Bunge, S. A., Lu, H., & Holyoak, K. J. (2022, April). Relational memory without explicit relations? Behavioral and computational evidence. Poster presented (by Ichien, Alfred, & Baia) at the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, California.
- Ichien, N.***, Liu, Q.*, Fu, S., Holyoak, K. J., Yuille, A., & Lu, H. (2021, July). *Visual analogy: Deep learning versus compositional models*. Poster presented (by Ichien) at the Annual Conference of the Cognitive Science Society, Online
- *Denotes equal author contribution
- Peng, Y., **Ichien, N.**, & Lu, H. (2019, May). *Perception of continuous movements from causal actions*. Poster presented (by Peng) at the Vision Sciences Society Annual Meeting, St. Pete Beach, Florida.
- Lu, H., Kadambi, A., **Ichien, N.**, & Qiu, S. (2018, May). That was awkward! How greetings go awry. Poster presented (by Kadambi) at the Vision Sciences Society Annual Meeting, St. Pete Beach, Florida.
- Ichien, N.T.**, Qu, Y., & Telzer, E.H. (2014, April). *Cultural identity shapes neural reactivity to prosocial decisions*. Poster presented (by Ichien) at the Social and Affective Neuroscience Society Conference, Denver, CO.
- Telzer, E.H., **Ichien, N.T.**, & Qu, Y. (2014, April). *Social rewards promote safe behavior: Maternal presence facilitates adaptive neural processing during adolescent risk taking*. Poster presented (by Telzer) at the Social and Affective Neuroscience Society Conference, Denver, CO.
- Ichien, N.T.**, Fuligni, A.J., Galvan, A., Lieberman, M.D., & Telzer, E.H. (2013, May). *Subjective social status and neural sensitivity to race*. Poster presented (by Ichien) at the International Culture Neuroscience Consortium Conference, Evanston, IL.
- Ichien, N.T.** & Kappes, A. (2013, January). *Rejected but not neglected: How group criticism enhances group member motivation to act egalitarian*. Poster accepted for presentation at the Society for Personality and Social Psychology – Group Processes and Intergroup Relations Preconference, New Orleans, LA.

Invited Talks

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| Oct 2021 | <i>Relation processing induces false memory for novel but relationally familiar word pairs</i>
UCLA, Psychology Department Student Data Blitz |
| Apr 2021 | <i>Two approaches to visual analogy: Deep learning versus compositional models</i>
Naval Research Laboratory, Reasoning Lunch Talk Series |
| Feb 2021 | <i>Relations in human cognition</i>
UC Berkeley, Building Blocks of Cognition Lab Meeting |
| July 2020 | <i>Predicting patterns of similarity among abstract semantic relations</i> |

Analogy List Seminar Series

- Apr 2020 *Visual analogy with car images*
JHU, Computational Cognitive Science Seminar Series
- Dec 2019 *Individual differences in judging similarity between semantic relations*
UCLA, CogForum Seminar Series
- July 2019 *Individual differences in judging similarity between semantic relations*
UCLA, CogFog Seminar Series

Teaching Experience

- Winter 2022 Teaching Assistant, Lab in Cognitive Psychology (PSYCH121)
UCLA Psychology department
Professor: Hongjing Lu
Overall TA Evaluation: 8.95/9
- Fall 2020 Teaching Assistant, Introduction to Cognitive Psychology (PYSCH120A)
UCLA Psychology department
Professor: Jesse Rissman
Overall TA Evaluation: 8.25/9
- Winter 2020 Teaching Assistant, Introduction to Cognitive Science (PSYCH85)
UCLA Psychology department
Professor: Jesse Rissman
Overall TA Evaluation: 8.28/9
- Fall 2019 Teaching Assistant, Introduction to Cognitive Psychology (PSYCH120A)
UCLA Psychology department
Professor: Courtney Clark
Overall TA Evaluation: 8.29/9

Guest Lectures

- Fall 2022 *Inverse MDS for similarity judgments*
Worcester Polytechnic Institute Psychology department
Alternative Research Methods in Learning Sciences (PSY590)
Professor: Stacy Shaw
- Winter 2020 *Analogy and Relational Reasoning*
UCLA Psychology department
Introduction to Cognitive Science (PSYCH85)
Professor: Jesse Rissman

Peer review

Conferences
Cognitive Science Society

Journals
Psychological Review

Service

May 2022	<i>MC, UCLA Psychology department</i> Undergraduate Research & Creativity Showcase
Feb 2022	<i>Research Speaker, UCLA Psychology department</i> Cognitive Area PhD interview weekend
Feb 2021	<i>Research Speaker, UCLA Psychology department</i> Cognitive Area PhD interview weekend
Oct 2020	<i>Panelist, UCLA Psychology department</i> Graduate Admissions Open House
Feb 2019	<i>Graduate Coordinator, UCLA Psychology department</i> Cognitive Area PhD interview weekend

Mentoring

Current undergraduate research assistants
Angela Kan (2021-present)

Former undergraduate research assistants
Aliza Ayaz (2018-2019) Current position: Full-time research assistant Weil Cornell
Medicine
Annya Dahmani (2021-2022) Current position: PhD student UC Berkeley