# **Trent N. Cash**

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## **Education**

Expected Spring 2025 – Ph.D., Joint Program in Social and Decision Sciences (SDS) and Psychology, Carnegie Mellon University

Advisors: Dr. Danny Oppenheimer (SDS) & Dr. Sharon Carver (Psychology)

August 2022 – M.S., Behavioral Decision Research, Carnegie Mellon University *Advisor:* Dr. Danny Oppenheimer

May 2020 – B.A., Double Major in Psychology and Public Management, Leadership, and Policy, The Ohio State University

*Minor*: Economics *Distinctions:* Summa Cum Laude, Honors, & Honors Research

## **Research Interests**

My primary research interests revolve around metacognition – the phenomenon that allows individuals to engage with their own cognitive processes. Within this domain, I am specifically interested in studying the role of metacognition in decision making (i.e., metareasoning), with a particular focus on the role of metacognition in subjective decision making. Outside of metareasoning, I also study strategic reasoning and the educational factors that influence the academic, social, and emotional outcomes of gifted students.

# **Publications**

- **Cash, T. N.,** & Oppenheimer, D. M. (2024). Parental rights or parental wrongs: Parents' metacognitive knowledge of the factors that influence their school choice decisions. *PLOS ONE, 19*(4), e0301768. https://doi.org/10.1371/journal.pone.0301768
- Kim, S., Lin, T.-J., Glassman, M., Ha, S. Y., Wen, Z., Nagpal, M., Cash, T. N., & Kraatz, E. (2023). Linking knowledge justification with peers to the learning of social perspective taking. *The Journal of Moral Education*. Advanced online publication. https://doi.org/10.1080/03057240.2023.2185597
- Cash, T. N., & Lin, T.-J. (2022). Psychological well-being of intellectually and academically gifted students in self-contained and pull-out gifted programs. *Gifted Child Quarterly*, 66(3), 188-207. <u>https://doi.org/10.1177/00169862211032987</u>.

#### **Working Papers**

**Cash, T. N.,** & Oppenheimer, D. M. (Under Review). Assessing metacognitive knowledge in subjective decisions: The *Knowledge of Weights* paradigm.

#### **Works in Progress**

- Kim, S., **Cash, T. N.**, & Lin, T.-J. (In Preparation). Examining the role of purpose and basic needs satisfaction in gifted and non-gifted adolescents' learning goal orientations.
- Lin, T.-J., **Cash, T. N.,** Lee, H. J., Kim, S., Anderman, E. M., Cha, W., Liu, X., & Wen, Z. (In Preparation). Impacts of the COVID-19 pandemic on gifted and non-identified early adolescents' academic and social-emotional development.
- **Cash, T. N.,** Lin, T.-J., Anderman, E., Kim, S., & Liu, X. (In Progress). Psychological well-being of students in self-contained and cluster gifted programs: A four-year longitudinal study.
- **Cash, T. N.,** & Oppenheimer, D. M. (In Progress). When to fix a Growth Mindset: Identifying boundary conditions for the superiority of Growth over Fixed Mindsets.
- Xu, W., **Cash, T. N.,** & Downs, J. S. (In Progress). Developing a psychometrically valid measure for identifying individual differences in strategic reasoning.
- Xu, W., **Cash, T. N.,** & Downs, J. S. (In Progress). Psychological impacts of test-optional policies on undergraduate application and admissions decisions.

#### **Conference Presentations**

- Cash, T. N., & Oppenheimer, D. M. (2024, June). Metacognitive knowledge in multi-attribute choice: Assessing the role of decision complexity. In V. Thompson (chair), *Meta-Reasoning: What do metacognitive judgments tell us about reasoning?* [Symposium]. International Conference on Thinking, Milan, Italy.
- **Cash, T. N.,** & Oppenheimer, D. M. (2024, June). *Evaluating the accuracy of LLMs' confidence judgments: A study of NFL predictions* [Oral Presentation]. International Conference on Thinking, Milan, Italy
- Lin, T.-J., **Cash, T. N.,** Lee, H. J., Kim, S., Anderman, E. M., Cha, W., Liu, X., & Wen, Z. (2024, April). *Impacts of the COVID-19 pandemic on gifted and non-identified early adolescents' academic and social-emotional development* [Poster Session]. Annual Meeting of the American Educational Research Association, Philadelphia, PA.

- Xu, W., Cash, T. N., & Downs, J. S. (2024, February). Validation of an individual-differences measure of k-Level strategic reasoning [Poster Session]. Annual Meeting of the Society for Personality and Social Psychology, San Diego, CA.
- **Cash, T.N.,** & Oppenheimer, D. M. (2023, November). *Evaluating metacognition in subjective, multi-attribute choice* [Poster Session]. Annual Meeting of the Society for Judgment and Decision Making, San Francisco, CA.
- Xu, W., Cash, T. N., & Downs, J. S. (2023, November). Strategic thinking in disclosing and unraveling of hidden information [Poster Session]. Annual Meeting of the Society for Judgment and Decision Making, San Francisco, CA.
- Cash, T. N., & Oppenheimer, D. M. (2023, November). Evaluating metareasoning in subjective, multi-attribute choice decisions [Oral Presentation]. 64<sup>th</sup> Annual Meeting of the Psychonomic Society, San Francisco, CA.
- Kim, S., Cash, T. N., Lin, T.-J., & Anderman, E. (2023, August). A person-centered approach to understanding early adolescents' purpose in academic and civic realms [Poster Session]. Annual Meeting of the American Psychological Association, Washington, D.C.
- **Cash, T. N.**, & Oppenheimer, D. M. (2022, December). *Metacognitive knowledge of preferences in policy relevant decisions* [Oral Presentation]. First Metareasoning Conference, Israel Institute for Advanced Studies, Jerusalem, Israel.
- **Cash, T. N.**, & Oppenheimer, D. M. (2022, November). *Do cognitive aids improve metacognitive knowledge in school choice decisions?* [Poster Session]. Annual Meeting of the Society for Judgment and Decision Making, San Diego, CA.
- Kim, S., Cash, T. N., Lin, T.-J., & Anderman, E. (2022, August). When you intend to help others, you learn better: Exploring the beneficial effects of purpose on early adolescents' learning using self-determination theory [Poster Session]. Annual Meeting of the American Psychological Association, Minneapolis, MN.
- **Cash, T. N.,** & Oppenheimer, D. M. (2022, February). *How well do parents know their own preferences when making school choice decisions?* [Poster Session]. Annual Meeting of the Society for Judgment and Decision Making, Virtual.
- Tonissen, A., **Cash, T. N.,** Lin, T.-J., & Anderman, E. (2021, April). *Math anxiety and cheating in classrooms serving gifted and non-identified students: Expectancy and value*

*mediations* [Paper Session]. Annual Meeting of the American Educational Research Association, Virtual.

- Cash, T. N., Lin, T.-J., Tonissen, A., & Anderman, E. (2020, November). *Psychological well-being of students in self-contained and cluster gifted programs* [On-Demand Session].
  67<sup>th</sup> Annual Convention of the National Association for Gifted Children, Virtual.
- Kim, S., Lin, T.-J., Ha, S.Y., Glassman, M., Cash, T. N., Wen, Z., & Nagpal, M. (2020, August). Direct evidence for the influence of collaborative small group discussions on social perspective taking [Poster Session]. Annual Convention of the American Psychological Association, Virtual.
- Ha, S. Y., Lin, T.-J., Kim, S., Glassman, M., & Cash, T. N. (2020, April). Developing epistemic cognition about social knowledge through small group discussions [Paper Session]. Annual Meeting of the American Educational Research Association, San Francisco, California. http://tinyurl.com/rswh6mz. (Conference canceled).
- Lin, T.-J., Glassman, M., Ha, S.Y., Kraatz, E., Paul, N., Hsieh, M., Sallade, R., Nagpal, M., Kim, S., Cash, T. N., & Tonissen, A. (2020, April). *The role of text in collaborative social reasoning discussions* [Structured Poster Session]. Annual Meeting of the American Educational Research Association, San Francisco, California. http://tinyurl.com/y2nh4w43. (Conference canceled).
- **Cash, T. N.,** & Lin, T.-J. (2019, November). *Differential effects of two gifted programs on gifted students' psychological well-being* [Poster Session]. 66<sup>th</sup> Annual Convention of the National Association for Gifted Children, Albuquerque, New Mexico.
- **Cash, T. N.,** & Lin, T.-J. (2019, April). *Evaluating the social and emotional well-being of gifted students receiving different levels of gifted services* [Poster Session]. Annual Meeting of the American Educational Research Association, Toronto, Ontario.

## Grants

January 2024 – Doctoral Dissertation Research Improvement Grant (DDRIG), National Science Foundation, \$29,900 (Received)

**Project:** Knowing Less Than We Can Tell: Assessing Metacognitive Knowledge in Subjective, Multi-Attribute Choice (Award No. 2333553)

August 2023 – Lorraine D. Eyde Fund Grant, American Psychological Foundation, \$3,350 (Received)

**Project:** The Impact of Opting Out of Standardized Tests on College Admissions: An Experimental Investigation

June 2023 – Graduate Student Small Research Grant, Center for Behavioral and Decision Research, \$2,450 (Received)

**Project:** Equilibrium in Voluntary Disclosure: Opting Out of Standardized Test Scores in College Admissions

February 2023 – Graduate Student Small Research Grant, Center for Behavioral and Decision Research, \$2,500 (Received)

**Project:** Evaluating Metacognitive Knowledge in Subjective Decisions

July 2022 – Esther Katz Rosen Fund Grant, American Psychological Foundation, \$49,985 (Received)

*Project:* The impact of the COVID-19 pandemic on gifted students' academic competence and socioemotional well-being during the middle school transition

July 2021 – Graduate Student Small Research Grant, Center for Behavioral and Decision Research, \$2,500 (Received)

*Project:* How do school rating websites' ratings impact parents' preferences between schools?

September 2020 – Academic Software Grant, Sawtooth Software, \$16,800 (Received in kind)

**Project:** A choice-based analysis of alignment between parents' school preferences and online school ranking formulas

May 2019 - Undergraduate Research Scholarship, The Ohio State University, \$5,500 (Received)

*Project:* Evaluating the social and emotional well-being of gifted students receiving different levels of gifted services

February 2019 – Small Research Grant, Department of Educational Studies, The Ohio State University, \$1,000 (Received)

**Project:** Evaluating the social and emotional well-being of gifted students receiving different levels of gifted services

December 2018 – Academic Enrichment Grant, Undergraduate Student Government, The Ohio State University, \$465 (Received)

**Project:** Evaluating the social and emotional well-being of gifted students receiving different levels of gifted services

## Honors, Awards, and Fellowships

August 2022 – Graduate Assessment Fellowship, Dietrich College, Carnegie Mellon University

June 2022 – Award for Excellence in Research, Mensa Education & Research Foundation

August 2021 – Presidential Fellowship, Dietrich College, Carnegie Mellon University

April 2019 – Undergraduate Research Fellowship, American Educational Research Association

April 2016 – Eminence Fellowship, The Ohio State University

# **Teaching Experience**

Spring 2023 - Graduate Teaching Assistant, Department of Psychology, Carnegie Mellon University

Course: Research Methods in Social Psychology

Spring 2022 – Graduate Teaching Assistant, Department of Social and Decision Sciences, Carnegie Mellon University

Course: Programming and Data Analysis for Social Scientists

Autumn 2021 – Graduate Teaching Assistant, Department of Social and Decision Sciences, Carnegie Mellon University

Course: Human Intelligence and Human Stupidity

Spring 2021 – Graduate Teaching Assistant, Department of Social and Decision Sciences, Carnegie Mellon University

Course: Behavioral Economics in the Wild

Autumn 2020 – Graduate Teaching Assistant, Department of Social and Decision Sciences, Carnegie Mellon University

*Course:* Reason, Passion, and Cognition

# Leadership, Service, & Community Engagement

Spring 2023 – Present – Director, Graduate Student Psychology Outreach Program

**Responsibilities:** Creating and organizing opportunities for members of the outreach program to engage with underrepresented students in the Pittsburgh community through Psychology-themed volunteering

- Fall 2022 Present Chair, SDS Graduate Student Events Committee *Responsibilities:* Planning and coordinating group activities to foster healthy and positive working relationships among graduate students in my department.
- Fall 2021 Fall 2022 Member, Psychology Outreach Program
  *Responsibilities:* Collaborating with other members of the Outreach Program to design psychology-themed activities and lessons for underrepresented students.
- November 2021 Workshop Leader, Stark County (OH) Gifted Coordinators Committee *Responsibilities:* Presenting my research on the psychological well-being of gifted students to the gifted coordinators of all the school districts in Stark County, Ohio.