

## Adam Green's Research

### How creativity works, and how it comes from the originality and meaning-making that is unique to human cognition:

Green, A., Beaty, R. E., Kenett, Y. N., & Kaufman, J. C. (2024). The Process Definition of Creativity. *Creativity Research Journal*, 36(3), 544-572. [This is one of the most cited papers in the field over the last two years. It has shifted focus to understanding the human processes that define creative thinking].

<https://drive.google.com/file/d/1b37TqFgt2fMy4q-goPOcyOMwiXEtvPhv/view>

Beaty, R. E., Cortes, R. A., Merseal, H. M., Hardiman, M. M., & Green, A. (2025). Brain networks supporting scientific creative thinking. *Psychology of Aesthetics, Creativity, and the Arts*, 19(6), 1321–1331. <https://drive.google.com/file/d/1tu6cAsaXsMlmV5UvsbbFDHQB8A9s7Oap/view>

Yang, W.\*, Green, A.\*, Chen, Q., Kenett, Y., Sun, J., Wei, D., & Qiu, J. (2022). Creative Problem Solving in Knowledge-Rich Contexts. *Trends in Cognitive Sciences*. <https://drive.google.com/file/d/1hk3PbgrTg-E1WwxY92fc5rM61NFang2q/view>

Beaty, R., Cortes, R., Zeitlin, D., Weinberger, A., & Green, A. (2021). Functional Realignment of Frontoparietal Subnetworks During Divergent Creative Thinking. *Cerebral Cortex*, 31 (10), 4464-4476.

[https://drive.google.com/file/d/1oMrs\\_ufFrncWZuWQ-nuvuBy\\_c6cpL316/view](https://drive.google.com/file/d/1oMrs_ufFrncWZuWQ-nuvuBy_c6cpL316/view)

Green, A., Spiegel, K., Giangrande, E., Weinberger, A., Gallagher, N. & Turkeltaub, P. (2017). Thinking cap plus thinking zap: tDCS of frontopolar cortex improves creative analogical reasoning and facilitates conscious augmentation of state creativity. *Cerebral Cortex*, 27(4), 2628-2639. [https://drive.google.com/file/d/1Xzq3rzyOL2Pad3u8Bp9uMdt6PwgNu\\_ZF/view](https://drive.google.com/file/d/1Xzq3rzyOL2Pad3u8Bp9uMdt6PwgNu_ZF/view)

Green, A. (2016). Creativity, within reason: Semantic distance and dynamic state creativity in relational thinking and reasoning. *Current Directions in Psychological Science*, 25, 28-35. <https://drive.google.com/file/d/1g8PBHpHZHJ1XpGQLnNmkMof2OXD50Jpt/view>

Green, A., Cohen, M., Raab, H., Yedibalian, C., & Gray, J. R. (2015). Frontopolar activity and connectivity support conscious augmentation of creative state. doi: 10.3389. *Human Brain Mapping*. <https://pubmed.ncbi.nlm.nih.gov/25394198/>

### AI homogenization relative to greater distinctness of human ideas:

Moon, K., **Green, A.**, & Kushlev, K. (in press). Homogenizing Effect of Large Language Models (LLMs) on Creative Diversity: An Empirical Comparison of Human and ChatGPT Writing. *Computers in Human Behavior*. <https://www.sciencedirect.com/science/article/pii/S294988212500091X>

Moon, K., Kushlev, K., Kaufman, J., Viskontas, I., & Green, A. (in prep). LLM-Era College Admissions Essays Exhibit Paradoxical Semantic Trends. [https://osf.io/preprints/psyarxiv/jsz58\\_v5](https://osf.io/preprints/psyarxiv/jsz58_v5)

### Computational approaches to measuring the distinctness of human ideas:

Johnson, D. **Green, A.**, & Beaty, R. (in press). Thematic profile analysis reveals the explanatory power of themes in creative ideas. *Psychology of Aesthetics, Creativity, and the Arts*.  
<https://psycnet.apa.org/record/2026-86616-001>

Johnson, D.R., Kaufman, J.C., Baker, B., Barbot, B., **Green, A.**, van Hell, J., Kennedy, E., Sullivan, G., Taylor, C., Ward, T. & Beaty, R., 2021. Divergent semantic integration (DSI): Extracting creativity from narratives with distributional semantic modeling. (2023). *Behavior Research Methods*, 1-34.  
<https://drive.google.com/file/d/1lXSIUHuvBRYByXTBfEcpM8iNXBMuwGMu/view>

**Creativity anxiety: People need to see evidence of their own creative efficacy in order to achieve their creative potential. This has never been more important than it is right now when AI threatens to undermine humans' sense of self-efficacy. Idea space expansion can show people their efficacy (their value) to expand idea space beyond AI:**

Daker, R., Slipenkyj, M., **Green, A. \***, Lyons, I. \* (2023). Evidence for avoidance tendencies linked to anxiety about specific types of thinking. *Scientific Reports*, 13(1), 3294.  
<https://drive.google.com/file/d/175JtBOvtwCSMIKHxGm5CJiFCXi1CO7QJ/view>

Ren, Z. \*, ☿Daker, R. \*, Shi, L., Sun, J., Beaty, R., Wu, X., Chen, Q., & **Green, A.**^, Qiu, J.^ (2021). Connectome-Based Predictive Modeling of Creativity Anxiety and Prediction of Creative Achievement. *NeuroImage*, 225, 117469.  
<https://drive.google.com/file/d/1PoZtbte7YgTIIItCuNRpQgC0OubCWWEbo/view>

☿Daker, R., ☿Cortes, R., Lyons, I., & **Green, A.** (2020). Creativity Anxiety: Evidence for Anxiety that is Specific to Creative Thinking, from STEM to the Arts. *Journal of Experimental Psychology: General*. 149 (1), 42.  
[https://drive.google.com/file/d/1XvOZkuG5PV\\_nyHJDxxbVV151BGbvIAo5/view](https://drive.google.com/file/d/1XvOZkuG5PV_nyHJDxxbVV151BGbvIAo5/view)

### Creativity predicts STEM success:

☿Daker, R., ★Colaizzi, G., ❖Mastrogiannis, A., Sherr, M., Lyons, I., & **Green, A.** (2022). Predictive Effects of Creative Abilities and Attitudes on Performance in University-Level Computer Science Courses. *Translational Issues in Psychological Science*. 8 (1), 104.  
[https://drive.google.com/file/d/1s4wwLazLiDUKnDcHaWK5lXYmaEOrt\\_8a/view](https://drive.google.com/file/d/1s4wwLazLiDUKnDcHaWK5lXYmaEOrt_8a/view)

### Some Wikipedia links that might be helpful in establishing expertise:

[https://en.wikipedia.org/wiki/Adam\\_Green\\_\(neuroscientist\)](https://en.wikipedia.org/wiki/Adam_Green_(neuroscientist))

[https://en.wikipedia.org/wiki/Creativity\\_Research\\_Journal](https://en.wikipedia.org/wiki/Creativity_Research_Journal)

[https://en.wikipedia.org/wiki/Society\\_for\\_the\\_Neuroscience\\_of\\_Creativity](https://en.wikipedia.org/wiki/Society_for_the_Neuroscience_of_Creativity)