

MELTEM KARACA

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EDUCATION

Ph.D.	University of Massachusetts Lowell Applied Psychology and Prevention Science Advisor: Lisa Geraci	2022 <i>Lowell, MA, USA</i>
M.S.	Bilkent University Neuroscience	2017 <i>Ankara, Turkey</i>
B.A.	Bilkent University Psychology	2015 <i>Ankara, Turkey</i>

ACADEMIC APPOINTMENTS

Assistant Professor of Psychology	Assumption University	2024-present
Postdoctoral Fellow	Center for Translational Cognitive Neuroscience Boston University School of Medicine and VA Boston Healthcare System	2022-2024 <i>Boston, MA</i>
Institutional Researcher	Graduate, Online & Professional Studies University of Massachusetts Lowell	2021-2022 <i>Lowell, MA</i>
Peer Mentor of Instructors	Department of Psychology University of Massachusetts Lowell	2021-2022 <i>Lowell, MA</i>
Instructor of Record	Department of Psychology University of Massachusetts Lowell	2019-2021 <i>Lowell, MA</i>
Research Assistant	Department of Psychology University of Massachusetts Lowell	2017-2019 <i>Lowell, MA</i>
Teaching Assistant	Department of Psychology University of Massachusetts Lowell	2017-2019 <i>Lowell, MA</i>
Teaching Assistant	Department of Psychology Bilkent University	2015-2017 <i>Ankara, Turkey</i>

RESEARCH INTERESTS

Memory and Aging, Memory Disorders, Self-Perceptions of Aging, Metacognition, Applying Cognitive Psychology to Educational Practice, Event-Related Potentials, Correcting Misconceptions

AWARDS AND SCHOLARSHIPS

- Assumption University Summer Research Scholarship, 2025
- UC-Davis/SDSU ERP Boot Camp, 2024
- Women in Cognitive Science Networking Award, Psychonomic Society, 2022 (\$1000)
- Graduate Research Award, University of Massachusetts Lowell, 2022 (\$500)
- Professional Development Award, University of Massachusetts Lowell, 2022 (\$500)
- Minority Workshop Award by Society of Multivariate Experimental Psychology to attend 3-day Multilevel Modeling Workshop, 2021 (\$475)
- Graduate Teaching Award, University of Massachusetts Lowell, 2021 (\$500)
- Professional Development Award, University of Massachusetts Lowell, 2021 (\$500)
- Lighting Talk Award (1st Place), Research Symposium at the University of Massachusetts Lowell, 2019 “*The dark side of interpolated testing: Does retrieval practice protect against task-switching cost?*” (\$250)
- Full Scholarship in Graduate Studies: MS Program in Neuroscience, Bilkent University, 2015-2017
- Pre-PhD Travel Award, Berlin School of Mind and Brain, Humboldt University, 2016
- Successive Merit Undergraduate Scholarship Award, Bilkent University, 2013-2015

GRANTS AND FELLOWSHIPS

- Faculty of Health and Social Sciences Student Assistantship Program Research Funding in University of Massachusetts Lowell, 2020 (\$2160)
- TUBITAK (the Scientific and Technological Research Council of Turkey) 2224-A Conference Travel Grant for Graduate Students, 2016 Budget: 2162 TL. (approximately \$1,081 at the time of funding)
- TUBITAK 2209 National/International Research Projects Fellowship Programme for Undergraduate Students-A (2015-1), 2015 Budget: 1100 TL. (approximately \$520 at the time of funding)

PEER-REVIEWED PUBLICATIONS

Note. * Denotes undergraduate co-author.

Lithander, M. P. G., Geraci, L., **Karaca, M.**, & Hunsberger, R. (2024). The effect of correcting neuromyths on students' and teachers' later reasoning. *Journal of Intelligence*, 12(10), 98. <https://doi.org/10.3390/jintelligence12100098>

Karaca, M., Geraci, L., Kurpad, N., Lithander, M. P. G., & Balsis, S. (2023). Low-performing students confidently overpredict their grade performance throughout the semester. *Journal of Intelligence*, 11(10), 188. <https://doi.org/10.3390/jintelligence11100188>

Karaca, M., Geraci, L., Tirso, R., & *Aube, J. (2023). The relationship between older adult's subjective age and perceived effort on cognitive tasks. *Experimental Aging Research*, 50(2), 248–278. <https://doi.org/10.1080/0361073X.2022.2145163>

Lithander, M. P. G., Geraci, L., **Karaca, M.**, & Rydberg, J. (2021) Correcting neuromyths: A comparison of different types of refutations. *Journal of Applied Research in Memory and Cognition*, 10(4), 577-588. <https://doi.org/10.1016/j.jarmac.2021.03.006>

Telesco, P., **Karaca, M.**, *Ewing, H., *Gilbert, K., *Lipitz, S., & Weinstein-Jones, J. (2021). Does retrieval practice enhance memorization of piano melodies? *College Music Society*, 61(2), 1-23. <https://doi.org/10.18177/sym.2021.61.sr.11525>

Karaca, M., Kurpad, N., Wilford, M. M., & Davis, S. D. (2020). Too much of a good thing: Frequent retrieval can impair immediate new learning. *Memory*, 28(10), 1181-1190. <https://doi.org/10.1080/09658211.2020.1826526>

Besken, M., *Solmaz, E., C., **Karaca, M.**, & Atılgan, N. (2019). Not all perceptual difficulties lower memory predictions: Testing the perceptual fluency hypothesis with rotated and inverted object images. *Memory & Cognition*, 47(5), 906-922. <https://doi.org/10.3758/s13421-019-00907-7>

COLLOQUIA AND CONFERENCE PRESENTATIONS

Note. *Denotes undergraduate co-author

Turk K., Yilmaz, Y., Xie, K., Kamaraj, H., Hagan, B., Lo Verde, C., Harer, S., Desmond, G., Mukhi, P., **Karaca, M.**, Frank, B., Lazar, S., & Budson, A. (2026). *Mindfulness increases resting state EEG gamma power in mild cognitive impairment*. Poster presented at Cognitive Neuroscience Society, Vancouver, Canada.

Karaca, M., Geraci, L., & Wang, Y. (November, 2025). *The influence of subjective age on emotional memory in older adults*. Poster presented at the annual Psychonomic Society conference, Denver, Colorado, USA.

Yilmaz, Y., Xie, K., Hagan, B., Kamaraj, H., Lo Verde, C., Kim, M., Sharma, T., **Karaca, M.**, Budson, A. E., Turk, K. (July, 2025). *EEG band power differences during meditation vs. resting state in novice older meditators with and without cognitive impairment: a pilot study*. Poster presented at the Neuroscience of the Everyday World Conference, Boston, MA.

Kim, M., Xie, K., Hagan, B., Kamaraj, H., Lo Verde, C., Yilmaz, Y., Sharma, T., Ruf, A., Zhang, T., **Karaca, M.**, Budson, A. E., Turk, K. (July, 2025). *The association of trait mindfulness and mood with autobiographical memory for everyday life Events*. Poster presented at the Neuroscience of the Everyday World Conference, Boston, MA.

- Karaca, M.**, Geraci, L., & Wang, Y. (June, 2025). *The relationship between subjective age and the positivity effect in memory*. Poster presented at the bi-annual meeting of the Society for Applied Research in Memory and Cognition, Kildare, Ireland.
- Hagan, B., Marin, A., Cecchi, M., **Karaca, M.**, Schiloski, K. Palumbo, R., Budson, A. E., & Turk, K. W. (May, 2025). *Cortical slowing on resting-state EEG and its association with cognitive performance in Alzheimer's disease*. Poster presented at the Massachusetts Neuropsychological Symposium, Waltham, MA.
- Ruf, A., Xie, K., Hagan, B., Waskow, E., Lo Verde, C., Kamaraj, H., **Karaca, M.**, Budson, A.E., & Turk, K.W. (November, 2024). *Mindfulness-based intervention for older veterans in early-stage Alzheimer's disease*. Poster presented at the Massachusetts Psychological Association annual conference, Norwood, MA.
- Lo Verde, C., Hagan, B., Kamaraj, H., Ruf, A., Waskow, E., Xie, K., **Karaca, M.**, DeCaro, R., Budson, A.E., & Turk, K. (November, 2024). *Health outcomes of mindfulness-based stress reduction for older adults with early-stage Alzheimer's disease*. Poster presented at the Northeast Ohio Medical University Annual Symposium, Rootstown, OH.
- Waskow, E., DeCaro, R., Hagan, B., Mazile, N., Marin, A., Chadalavada, M., Morreale, K., **Karaca, M.**, Turk, K.W., & Budson, A.E. (July, 2024). *Understanding how false memories relate to daily life in Alzheimer's disease and related dementias*. Poster presented at the Alzheimer's Association International Conference, Philadelphia, PA.
- Chadalavada, M., DeCaro, R., **Karaca, M.**, Hagan, B., Morreale, K., Waskow, E., Turk, K., Budson, A. E., & Anderson, D. (2024, December). *Health outcomes of transitional space design for older adults with dementia*. Poster presented at Alzheimer's Association, Philadelphia, PA, USA.
- Morreale, K., **Karaca, M.**, Chadalavada, M., Waskow, E., Hagan, B., DeCaro, R., Anderson, N., Budson, A. E., & Turk, K. (2024, December). *Behavioral estimates of recognition memory in Veterans with mild TBI at risk of neurodegeneration*. Poster presented at Alzheimer's Association, Philadelphia, PA, USA.
- Waskow, E., DeCaro, R., Hagan, B., Mazile, N., Marin, A., Chadalavada, M., Morreale, K., **Karaca, M.**, Turk, K., & Budson, A. E. (2024, December) *Understanding how false memories relate to daily life in Alzheimer's disease and related dementias*. Poster presented at Alzheimer's Association, Philadelphia, PA, USA.
- Budson, A. E., Hagan, B., DeCaro, R. E., **Karaca, M.**, Waskow, E., Chadalavada, M., Morreale, K., & Turk, K. W. (March 2024). *Evaluating the memory theory of consciousness*. Poster presented at the American Psychiatric Association Annual Meeting, Houston, TX.
- Chadalavada, M., **Karaca, M.**, Hagan, B., DeCaro, R., Morreale, K., Waskow, E., Budson, A.E., & Turk, K.W. (November 2023). *Neural correlates of recollection and familiarity brain structures in Veterans with traumatic brain injury*. Poster presented at the Annual CTE Conference, Boston, MA.

- Morreale, K., **Karaca, M.**, Hagan, B., Chadalavada, M., Waskow, E., DeCaro, R., Budson, A.E., & Turk, K.W. (November 2023). *Examining behavioral estimates of recollection worse in patients with traumatic brain injury*. Poster presented at the Annual CTE Conference, Boston, MA.
- Budson, A. E., Hagan, B., DeCaro, R. E., **Karaca, M.**, Waskow, E., Chadalavada, M., Morreale, K., & Turk, K. W. (October 2023). *Evaluating the memory theory of consciousness*. Poster presented at the Science, Spirituality and Social Impact Conference, Boston, MA. *Won best abstract
- Hagan, B., **Karaca, M.**, Waskow, E., Turk, K. & Budson, A. E., (2023, July). *Dementia as a disorder of consciousness*. Poster presented at Association of Scientific Studies of Consciousness, New York City, NY, USA.
- Morreale, K., Marin, A., **Karaca, M.**, Hagan, B., Chadalavada, M., DeCaro, R., Brown, E., Salat, D., Budson, A. E., & Turk, K. (2023, July). *The relationship between event-related potentials and MRI cortical atrophy in a memory disorders clinic*. Poster presented at the Alzheimer's Association International Conference, Amsterdam, Netherlands.
- Karaca, M.**, Geraci, L., & Wang, Y., (2022, April). *Do older adults remember more positive memories when they feel older than their chronological age?* Talk presented at the bi-annual Cognitive Aging Conference, Atlanta, GE, USA.
- Karaca, M.**, *Aube, J., Geraci, L., & Tirso, R. (2022, April). *The relationship between subjective age and perceived effort in older adults*. Poster presented at the Cognitive Aging Conference 2022, Atlanta, GE, USA.
- Karaca, M.**, Lithander, M., & Geraci, L. (2021, July). *Learning by retrieval practice: Is it effective for learning statistical concepts?* Talk presented at the virtual meeting of the Society of Applied Research in Memory and Cognition.
- Lithander, M., **Karaca, M.**, & Geraci, L. (2021, July). *Correcting neuromyths: A comparison of different types of refutations and continued Influence*. Talk presented at the virtual meeting of the Society of Applied Research in Memory and Cognition.
- Kurpad, N., **Karaca, M.**, Wilford, M. M., & Davis, S., (2021, July). *Can retrieval practice eliminate the cost of task-switching, even after a delay?* Talk presented at the virtual meeting of the Society of Applied Research in Memory and Cognition.
- Karaca, M.**, Lithander, M., & Geraci, L. (2021, November). *Examining the use of retrieval practice for learning statistics*. Poster presented at the annual Psychonomic Society conference, Virtual Meeting.

Karaca, M. (2021, January). *Integrating Metacognition through innovative teaching strategies within content moderation practice*. Invited talk at Concentrix. Toronto, Ontario, Canada.

Karaca, M. (2020, December). *Examining methods to improve students' learning performance and understanding the relationship between self-perceptions of aging and memory*. Invited talk presented at Schacter Memory Lab at Harvard University. Cambridge, MA, USA.

Lithander, M., **Karaca, M.**, *Dipano, M., & Geraci, L. (2020, November). *Examining the effect of corrections on the continued influence of neuromyths*. Poster presented at the annual Psychonomic Society conference, Virtual Meeting.

Lithander, M., Geraci, L., & **Karaca, M.** (2019, November). *Correcting neuromyths: A comparison of interventions*. Poster presented at the annual Psychonomic Society conference, Montréal, Québec, Canada.

Karaca, M., Kurpad, N., Wilford, M. M., & Weinstein, Y. (2019, June). *The dark side of interpolated testing: Does retrieval practice protect against the task-switching cost?* Poster presented at the bi-annual meeting of the Society for Applied Research in Memory and Cognition, Cape Cod, MA, USA.

Karaca, M., *Ewing, H., Telesco, P., & Weinstein-Jones, Y. (2019, February). *The effect of retrieval practice on long-term retention of musical notes*. Poster presented at the Harvard University Music Conference, Boston, MA, USA.

Lithander, M., **Karaca, M.**, Sumeracki, A., M., & Weinstein, Y. (2018, November). *The effects of religious practice and education on beliefs in neuromyths*. Poster presented at the annual Psychonomic Society conference, New Orleans, LA, USA.

*Bilgin, E., **Karaca, M.**, *Ersin, M., & Besken, M. (2018, November). *Vividness and fluency of autobiographical memories*. Poster presented at the annual meeting of National Psychology conference. Ankara, Turkey.

Karaca, M., *Ewing, H., Telesco, P., & Weinstein, Y. (2018, May). *Application of retrieval practice to music memorization*. Poster presented at the annual meeting of the Association for Psychological Science, San Francisco, CA, USA.

Karaca, M., & Clarke, A. (2017, October). *The effect of task on cue usefulness for visual scene classification*. Poster presented at the annual meeting of the New England Psychological Association, Newton, MA, USA.

Karaca, M., Atilgan N., & Besken, M. (2016, May). *Testing the perceptual fluency hypothesis through inverted pictures*. Talk presented at the International Conference on Memory, Budapest, Hungary.

Karaca, M., Atilgan, N., & Besken, M. (2016, May). *The picture generation effect on memory and metamemory and its relationship with perceptual fluency hypothesis*. Poster presented at the 3rd International Symposium on Brain and Cognitive Science, Istanbul, Turkey.

Karaca, M., Atilgan, N., & Besken, M. (2015, May). *Testing the perceptual fluency hypothesis and its relationship with metamemory*. Poster presented at the annual meeting of Bilkent University Student Presentations, Ankara, Turkey.

Atilgan, N., **Karaca, M.,** Kafalıgonul M., & Boyacı, H. (2015, May). *Effect of integration of visual and auditory information on attention and cognitive performance*. Poster presented at the annual meeting of Bilkent University Student Presentations, Ankara, Turkey.

FACULTY ADVISOR FOR STUDENT PRESENTATIONS

Note. *Denotes undergraduate co-author

*Benway, J., & **Karaca, M.** (2025, September). *The role of age-related stereotype threat in recognition memory*. Poster presented at the Annual Undergraduate Symposium. Assumption University

RESEARCH MENTORSHIP

Supervised undergraduate research, directed studies, and Honors theses:

- Avi Miller, Honor's Theses Mentee, Assumption University
- Joseph Benway, Summer Research Fellow, Assumption University
- Myna Chadalavada, M.S., Research Assistant, Boston University
- Kristina Morreale, M.A., Research Assistant, VA Boston
- Andrea Ruf, PsyD in Clinical Psychology, William James College
- Tala Taheri, PsyD in Clinical Psychology, William James College
- Jonathan Aube, Honors Thesis, University of Massachusetts Lowell
- Caroline Finn, Directed Research in Psychology, University of Massachusetts Lowell
- Sophie Tamarkin, Directed Research in Psychology, University of Massachusetts Lowell
- Aifuwa Asemota, Research Service Learning in Psychology, University of Massachusetts Lowell
- Megan Witkowski, Directed Research in Psychology, University of Massachusetts Lowell
- Hayley Cooper, Directed Research in Psychology in University of Massachusetts Lowell
- Alexander Lacasse, Directed Research in Psychology in University of Massachusetts Lowell
- Ezgi Bilgin, Senior Thesis in Psychology in Bilkent University
- Melike Ersin, Directed Research in Psychology in Bilkent University

PROFESSIONAL DEVELOPMENT

Ad Hoc Reviewer, Memory and Cognition | Applied Cognitive Psychology | Journal of Cognition | Experimental Aging Research

Professional Memberships, The Psychonomic Society, Society for Applied Research in Memory and Cognition, American Psychological Association (APA), Women in Cognitive Science (WICS), SPARK Society, Association for Institutional Research (AIR)

Translator, PsychoPY (Open-Source Software for Neuroscience and Psychology), Volunteering to translate the software from English to Turkish (Diversity and Internalization grant by Chan Zuckerberg Initiative)

SERVICE

Assumption University - Institution, Research Scholar Committee (2025-present), Merit Awards Committee (2025-present), and Neuroscience Advisory Committee (2025-present),

Assumption University - Department, Psi Chi/Psychology Club Faculty Advisor (2025-present), Psychology Department Summer Assessment Team (2025)

Assumption University - One-time and recurring yearly events, Faculty Representative – Fall and Spring Admission Events (2024-present)

TEACHING EXPERIENCE

Instructor of Record, Assumption University

- Introduction to Brain and Behavior
 - Fall 2024 (28 students, 3 credits)
 - Spring 2025 (30 students, 3 credits)
 - Fall 2025 (29 students, 3 credits)
 - Spring 2026 (27 students, 3 credits)
- Experimental Techniques in Human Neuroscience
 - Fall 2024 (4 students, 4 credits)
 - Fall 2025 (2 students, 4 credits)
- Psychology of Aging (13 students, 3 credits)
 - Spring 2025 (13 students, 3 credits)
 - Spring 2026 (27 students, 3 credits)
- Cognitive Neuroscience
 - Spring 2025 (4 students, 3 credits)
 - Spring 2026 (7 students, 3 credits)

Instructor of Record, University of Massachusetts Lowell, Department of Psychology

- Introduction to Psychological Science (online and in-person)
 - Spring 2021 (49 students, 3 credits)

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- Fall 2020 (59 students, 3 credits)
 - Spring 2020 (49 students, 3 credits)
 - Fall 2019 (49 students, 3 credits)
 - Spring 2019 (49 students, 3 credits)

Teaching Assistant, University of Massachusetts Lowell, Department of Psychology

- Cognitive Psychology
- Psychology of Decision-making
- Research Methods I
- Research Methods III
- Introduction to Psychological Science

Guest Lecturer, University of Massachusetts Lowell, Department of Psychology

- Cognitive Psychology
- Introduction to Psychological Science

Teaching Assistant, Bilkent University, Department of Psychology

- Statistics II
- Introduction to Psychology/Social and Developmental
- Introduction to Psychology/Cognitive and Biological
- Laboratory in Psychological Research

Lab Teaching Assistant, Bilkent University, Department of Psychology

- Introduction to Computing and Programming