

PROMOTION RECOMMENDATION
The University of Michigan
College of Literature, Science, and the Arts

Daniel H. Weissman, associate professor of psychology, with tenure, College of Literature, Science, and the Arts, is recommended for promotion to professor of psychology, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	1999	University of Illinois, Urbana-Champaign
M.A.	1997	University of Illinois, Urbana-Champaign
B.S.	1991	University of Illinois, Urbana-Champaign

Professional Record:

2015 – present	Faculty Associate, Research Center for Group Dynamics, University of Michigan
2012 – present	Associate Professor, Department of Psychology, University of Michigan
2006 – 2012	Assistant Professor, Department of Psychology, University of Michigan
2004 – 2006	Assistant Research Professor, Duke University
1999 – 2004	Post-doctoral Fellow, Duke University

Summary of Evaluation:

Teaching – Professor Weissman has taught courses within the domains of cognitive psychology and cognitive neuroscience. In response to departmental need for courses in brain-based research methods, he developed an undergraduate course titled “Research Methods in Cognitive Neuroscience.” In the first half of the semester, students learn about experimental design through a hands-on learning assignment. For the second half, students are exposed to various aspects of studying human brain function using functional magnetic resonance imaging (MRI). This is a valuable opportunity for undergraduates to explore this scientific enterprise that is a mainstay of research on the human mind and brain. Professor Weissman’s graduate teaching also fulfills a very important need for the department and for other units that require training in human brain imaging methods (e.g., psychiatry, communication studies, Institute for Social Research). Professor Weissman also teaches a graduate seminar on attention and cognitive control that draws students from clinical, developmental, biopsychology, and cognitive areas of psychology. Throughout the semester, he provides ample feedback on students’ writings. Professor Weissman has a strong track record of informal teaching and mentoring of undergraduate and graduate students. He has provided helpful and thoughtful one-on-one mentoring to many undergraduate students. Several undergraduates are co-authors with him on papers in top-tier psychology journals based on their work in his laboratory and they have gone on to successful graduate careers. Professor Weissman is an outstanding graduate student mentor. He shows tremendous commitment and care for each student, which is evidenced by the sheer number of hours he spends with them discussing methodology, interpretation of data, and professional development.

Research – Professor Weissman’s research seeks to uncover fundamental processes of human attention and cognitive control. Much of this work focuses on distractibility in attention. Within this research domain, he has dedicated himself to bringing clarity to a phenomenon called the Congruency Sequence Effect (CSE), which has been a fundamental, quantitative behavioral index of attentional efficiency useful for evaluating the integrity of control processes that contribute to health-related behaviors, such as distracted driving and addiction. Over the past decade however,

controversy surged about whether the CSE was a “real effect” or not. This is the question that Professor Weissman tackled and ultimately settled through careful, rigorous analytic experimentation conducted since his promotion to associate professor. Through a series of twelve or more empirical papers, Professor Weissman has convincingly demonstrated that CSE does exist even when confounds are removed, and has established the methodological *Desiderata* for obtaining accurate, quantitative measurements of this effect. He has also taken his expertise of attention in two clinically-relevant directions. First, Professor Weissman teamed up with a neurosurgeon to use electrodes placed on the cortex to examine neural activity during cognitive tasks before surgery. Through this collaboration, he is helping to map patients’ crucial attention regions in the brain, so that they will be preserved following surgery. The second area of clinical relevance that Professor Weissman pursues examines cognitive control function in populations with attention deficits. In one study, he showed that individuals with post-traumatic stress disorder had difficulty disengaging spatial attention and that this difficulty was associated with greater brain connectivity between specific networks. In another study, he evaluated cognitive control in children with obsessive-compulsive disorder (Liu et al., 2012). By extending his work into these areas, Professor Weissman’s research contributions translate basic scientific evidence to clinical populations where the research may positively impact individual lives.

Recent and Significant Publications:

- “Identifying stimuli that cue multiple responses triggers the congruency sequence effect independent of response conflict,” with K. M. Colter, et al., *Journal of Experimental Psychology: Human Perception and Performance*, 43, 2017, pp. 677-689.
- “Different levels of learning shape the congruency sequence effect,” with Z. Hawks and T. Egner, *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 42, 2016, pp. 566-583.
- “Contingent attentional capture triggers the congruency sequence effect,” with J. R. Schmidt, *Acta Psychologica*, 159, 2015, pp. 61-68.
- “Determinants of congruency sequence effects without learning and memory confounds,” with J. Jiang and T. Egner, *Journal of Experimental Psychology: Human Perception and Performance*, 40(5), 2014, pp. 2022-2037.

Service – Professor Weissman has distinguished himself as someone who is fully committed to providing valuable service. He was elected to the Psychology Executive Committee. Within the cognition and cognitive neuroscience area, he has served as the chair of the Social Committee, chair of the weekly seminar series, and the chair of the Graduate Admissions Committee. He is a mentor for an assistant professor, with whom he meets weekly. At the national and international levels, he is on the editorial board for the *Journal of Experimental Psychology: Human Perception and Performance* and has served as a reviewer for more than 20 additional journals.

External Reviews:

Reviewer (A)

“In sum, Dr. Weissman is a very strong cognitive scientist who has maintained a sustained record of research productivity across a 20 year period in the field. His work has had a real impact in the literature, and I imagine that this impact will only increase as more time passes. His promotion case has my strong recommendation.”

Reviewer (B)

"...I found [his] papers...to be paragon examples of high-quality cognitive experimental research that...contained very clear writing, focused experimental questions and a clear-cut rationale, rigorous methods, and a highly sensible progression of experiments."

Reviewer (C)

"...he has very significantly contributed to the analysis of how individuals process information under conditions of high level of noise, and in which different environmental features may be associated with different course of action."

Reviewer (D)

"Simply put, I believe that he is one of the stars of the field."

Reviewer (E)

"...in our modern, technologically dominated society 'distraction' has become a serious, and often deadly, hazard. Weissman's work on congruency sequence effects...is about the cognitive mechanisms that underly [sic] distraction and our efforts to avoid it."

Reviewer (F)

"Dr. Weissman has taken this challenge particularly seriously and has provided the strongest, and maybe the only unambiguous, evidence for true conflict adaptation. ... Dr. Weissman's work is programmatic and focused; his experimental designs are both creative and flawlessly executed."

Summary of Recommendation:

Professor Weissman's research has made foundational, scientific contributions. He has a strong track-record in teaching and mentoring, and he is committed to high quality service. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Associate Professor Daniel H. Weissman be promoted to the rank of professor of psychology, with tenure, College of Literature, Science, and the Arts.



Andrew D. Martin, Dean
Professor of Political Science and Statistics
College of Literature, Science, and the Arts

May 2018