



Matthew Dylan Lieberman

Award for Distinguished Scientific Early Career Contributions to Psychology

Citation

“For his pioneering theory and research on mechanisms underlying social cognition. A founder of social cognitive neuroscience, Matthew D. Lieberman uses functional magnetic resonance imaging (fMRI) to elucidate long-standing issues in social psychology, including dual-processing models of self and social perception. His work integrates processes at the social/affective/experiential level, the cognitive computational level, and the neural level of analysis. His groundbreaking studies of the X (reflexion) and C (reflection) systems and their neural bases have clarified problems ranging from self-knowledge to affective disruption and social rejection. When he helped create this field, the term *social cognitive neuroscience* was hardly known. That it currently represents a distinct subdiscipline attests not only to the vigor and dedication he has brought to the field but also to its wide-ranging impact.”

Biography

Matthew Dylan Lieberman was born at the New Jersey shore on May 5, 1970. He was raised by his loving parents, Janis Albuck, David Lieberman, and Barbara Lieberman. His two younger brothers, Benjamin and Daniel, along with numerous grandparents, aunts, uncles, and cousins were important figures in his childhood.

Multiple childhood events contributed to his later academic interests. His first-grade teacher, Mary Austin, who had marched with Martin Luther King Jr., recounted tales

of the civil rights movement in their after-school meetings. In high school, he learned about obedience to authority, coalition formation, and intergroup conflict trying to survive that microcosm of society. Lieberman devoted himself to running cross-country, which yielded insights into self-regulatory processes and the paradox of self as both controller and controlled and which led to a brief stint as the top-ranked runner in Atlantic County. Perhaps most important during these early years were the various philosophy texts by Nietzsche, Sartre, and Plato sitting on the family bookshelves that first introduced Lieberman to important themes that continue to pervade his thinking.

In 1988, Lieberman headed to Rutgers College, where he double majored in philosophy and psychology. Early courses in psychology were not particularly exciting, although being (falsely) accused of cheating in Psychology 101 certainly got his attention. At this stage, philosophy courses were what occupied Lieberman and his close friends, Jeff Greenfield, Min Lee, and Chris Kooshakjian. Courses on Philosophy of Mind taught by Stephen Stich and Jerry Fodor were fascinating explorations into classic and cutting-edge understandings of the human mind.

More moving were courses on continental phenomenology and 19th-century German philosophy taught by Bruce Wilshire. To this day, Wilshire is the largest intellectual influence in Lieberman's thinking, starting from Wilshire's insight that a theory is inherently flawed if it dismisses experience because it cannot explain experience. In these cases, it is the theory, not experience, that is on shaky ground. Phenomenology “hot off the griddle of life” is the starting point with which theories and ideas must ultimately reconnect. Wilshire introduced Lieberman to the works of William James and George Herbert Mead, which provided a bridge between philosophy and empirical psychology.

Although deeply inspired by philosophy, Lieberman was also acutely aware that each generation produces, at most, one significant philosopher with truly important ideas and that he was not this person. Fortunately, in his junior year, he took a social psychology course with Lee Jussim, who made psychology come alive for Lieberman. Social psychology excited Lieberman both because it made direct contact with real-world experience and because it focused extensively on how one's understanding of reality depends on socially negotiated construals rather than on brute facts. Lieberman conducted an honors thesis with Jussim on self-fulfilling prophecies.

Lieberman began the doctoral program in social psychology at Harvard University in 1993. Although he received excellent advising and support from Ellen Langer and Robert Rosenthal, Lieberman lacked a clear sense of direction early on. However, teaching a year-long seminar in Cabot House, an undergraduate dormitory where he lived, was tremendously rewarding. Lieberman has main-

tained friendships with several of these students, including Sally Wolf, Herman Sanchez, Stacey Dicicco, and Tess Wilkinson-Ryan, and eventually won the Levenson Award for teaching given each year to one graduate student at Harvard University.

In his third year, Lieberman's lack of direction led him to a failed bid to join the performance art group Blue Man Group. Fortunately, Daniel Gilbert joined the faculty at Harvard and Lieberman knew immediately that he would benefit tremendously from Gilbert's mentoring. Gilbert struck Lieberman as one of a few social psychologists who approached empirical work with the eye of a philosopher and thus provided an important demonstration of how to combine the two. Gilbert also had his finger on the pulse of cutting-edge social cognition. Lieberman was initially intrigued by Gilbert's work on dual-process models of social cognition, an interest that remains to this day in his work on the X- and C-systems as distinct neural systems supporting automatic and controlled social cognition. However, Gilbert was also transitioning into his new interest in affective forecasting, and getting to see the birth of a new research area was exciting and instructive for Lieberman. The discussions of possible new directions in affective forecasting at lab group meetings with Kevin Ochsner, Jason Mitchell, Jane Jenkins, Erin Driver-Linn, Nancy Puccinelli, and Liz Dunn were invigorating. Lieberman is also proud of the academic lineage of the Gilbert lab, which can be traced back through Ned Jones, Jerome Bruner, and Gordon Allport to earlier ancestors Carl Stumpf and Edmund Husserl (who contributed to the training of Martin Heidegger, Kurt Lewin, Kurt Koffka, and Wolfgang Kohler, who in turn were instrumental in the development of continental phenomenology, gestalt psychology, and social psychology).

Lieberman met Ochsner just before Gilbert arrived and together with several other cognitive neuroscience graduate students from Harvard attended the Summer Institute in Cognitive Neuroscience (Davis, California, 1996), affectionately referred to as *braincamp*. This program opened Lieberman's eyes to the world of cognitive neuroscience just enough to get a good glimpse of things. Clearly, something about playing poker and volleyball with future stars like Randy Buckner, Todd Braver, Brad Postle, and Geoff Aguirre rubbed off on him despite his having little interest in the brain prior to Braincamp.

Over the next year, Lieberman and Ochsner slowly realized that they could profitably combine their research interests in what they called *social cognitive neuroscience*. Social cognitive neuroscience uses neuropsychology and neuroimaging techniques to address questions of social cognition and hopefully shed new light on social psychological theories. Lieberman and Ochsner published several articles around 2000 that helped popularize the approach, including research showing that amnesics, who could not

remember what occurred moments earlier, showed typical cognitive dissonance effects despite no awareness of their counterattitudinal behavior. Lieberman's early success would not have occurred without direct and indirect support from various senior members of the field, including Steve Breckler, Carolyn Morf, Robert Savoy, Steve Kosslyn, Daniel Schacter, Todd Heatherton, Ralph Adolphs, Susan Fiske, Mahzarin Banaji, and John Cacioppo.

Lieberman moved to the University of California, Los Angeles in 1999, first working as a postdoctoral fellow with Barbara Knowlton and Shelley Taylor and then becoming a member of the faculty in 2000. In 2001, Lieberman, along with Marco Iacoboni and Alan Fiske, hosted the first conference on social cognitive neuroscience at the University of California, Los Angeles (April 2001).

During his postdoctoral training, Lieberman met his future wife and collaborator, Naomi Eisenberger, who was working in Taylor's lab as a graduate student. Lieberman and Eisenberger have had an extremely rewarding collaboration producing more than a dozen articles on the neural bases of social rejection (her idea) and the neural basis of symbolic affect regulating nonsymbolic affect (his idea). Their favorite collaboration is their son, Ian James, named in part for William James (Haruki Murakami Lieberman never quite had the right ring to it).

The Social Cognitive Neuroscience Laboratory at the University of California, Los Angeles has been a constant source of pride for Lieberman. He is grateful for the wonderful students he has been able to watch develop during their years together and beyond: David Amodio, Elliot Berkman, Lisa Burklund, Joan Chiao, David Creswell, Molly Crockett, Emily Falk, Tristen Inagaki, Johanna Jarcho, Yoona Kang, Carrie Masten, Sarah Master, Sylvia Morelli, Junko Obayashi, Jennifer Pfeifer, Lian Rameson, Ajay Satpute, Julie Smurda, Robert Spunt, Golnaz Tabibnia, Eva Telzer, Sabrina Tom, Baldwin Way, and Charlene Wu. He has enjoyed collaborating with them on studies of dual-process aspects of social cognition, self-knowledge, fairness, decision making, prejudice, and placebo effects.

The University of California, Los Angeles has been an unparalleled place for Lieberman in terms of collegial support and low boundaries to interdisciplinary research, and he is particularly appreciative of the support he has received from Robert Bjork, Susan Bookheimer, Ty Cannon, Mark Cohen, Michelle Craske, Mirella Dapretto, Steve Engel, Ahmad Hariri, Mike Irwin, Edythe London, Emeran Mayer, John Mazziotta, Hector Myers, Bruce Naliboff, Anne Peplau, Russ Poldrack, Emil Reisler, and Fred Saab. Lieberman is also indebted to other social psychologists who have substantially informed his thinking over the years, including Roy Baumeister, John Bargh, Jonathan Schooler, Tim Wilson, Daniel Wegner, Robert Wicklund, Chuck Carver, Michael Scheier, Daniel Batson, William Swann, Hazel Markus, Richard Nisbett, and Lee Ross.

Lieberman is currently devoting time as the founding editor of the journal *Social Cognitive and Affective Neuroscience* (SCAN). He is also working on a book with the working title *Experience Shrugged: The Rise of Simulated Experience in Mental Life and the Modern World* that ties together his long-standing interests from social cognitive neuroscience and philosophy.

Selected Bibliography

Eisenberger, N. I., & Lieberman, M. D. (2004). "Why it hurts to be left out": The neurocognitive overlap between physical and social pain. *Trends in Cognitive Sciences*, 8, 294–300.

Eisenberger, N. I., Lieberman, M. D., & Williams, K. D. (2003, October 10). Does rejection hurt? An fMRI study of social exclusion. *Science*, 302, 290–292.

Eisenberger, N. I., Way, B., Taylor, S. E., Welch, W. T., & Lieberman, M. D. (2007). Understanding genetic risk for aggression: Clues from the brain's response to social exclusion. *Biological Psychiatry*, 61, 1100–1108.

Gilbert, D. T., Lieberman, M. D., Morewedge, C. K., & Wilson, T. D. (2004). The peculiar longevity of things not so bad. *Psychological Science*, 15, 14–19.

Iacoboni, M., Lieberman, M. D., Knowlton, B. J., Molnar-Szakacs, I., Moritz, M., Throop, C. J., & Fiske, A. P. (2004). Watching social interactions produces dorsomedial prefrontal and medial parietal BOLD fMRI signal increases compared to a resting baseline. *NeuroImage*, 21, 1167–1173.

Lieberman, M. D. (2000). Intuition: A social cognitive neuroscience approach. *Psychological Bulletin*, 126, 109–137.

Lieberman, M. D. (2006). Social cognitive and affective neuroscience: When opposites attract. *Social Cognitive and Affective Neuroscience*, 1, 1–2.

Lieberman, M. D. (2007). Social cognitive neuroscience: A review of core processes. *Annual Review of Psychology*, 58, 259–289.

Lieberman, M. D., Chang, G. Y., Chiao, J., Bookheimer, S. Y., & Knowlton, B. J. (2004). An event-related fMRI study of artificial grammar learning in a balanced chunk strength design. *Journal of Cognitive Neuroscience*, 16, 427–438.

Lieberman, M. D., Eisenberger, N. I., Crockett, M. J., Tom, S., Pfeifer, J. H., & Way, B. M. (2007). Putting feelings into words: Affect labeling disrupts amygdala activity to affective stimuli. *Psychological Science*, 18, 421–428.

Lieberman, M. D., Gaunt, R., Gilbert, D. T., & Trope, Y. (2002). Reflection and reflexion: A social cognitive neuroscience approach to attributional inference. *Advances in Experimental Social Psychology*, 34, 199–249.

Lieberman, M. D., Hariri, A., Jarcho, J. J., Eisenberger, N. I., & Bookheimer, S. Y. (2005). An fMRI investigation of race-related amygdala activity in African-American and Caucasian-American individuals. *Nature Neuroscience*, 8, 720–722.

Lieberman, M. D., Jarcho, J. M., Berman, S., Naliboff, B., Suyenobu, B. Y., Mandelkern, M., & Mayer, E. (2004). The neural correlates of placebo effects: A disruption account. *NeuroImage*, 22, 447–455.

Lieberman, M. D., Jarcho, J. M., & Obayashi, J. (2005). Attributional inference across cultures: Similar automatic attributions and different controlled corrections. *Personality and Social Psychology Bulletin*, 31, 889–901.

Lieberman, M. D., Jarcho, J. M., & Satpute, A. B. (2004). Evidence-based and intuition-based self-knowledge: An fMRI study. *Journal of Personality and Social Psychology*, 87, 421–435.

Lieberman, M. D., Ochsner, K. N., Gilbert, D. T., & Schacter, D. L. (2001). Do amnesics exhibit cognitive dissonance reduction? The role of explicit memory and attention in attitude change. *Psychological Science*, 12, 135–140.

Lieberman, M. D., & Rosenthal, R. (2001). Why introverts can't always tell who likes them: Multitasking and nonverbal decoding. *Journal of Personality and Social Psychology*, 80, 294–310.

Ochsner, K. N., & Lieberman, M. D. (2001). The emergence of social cognitive neuroscience. *American Psychologist*, 56, 717–734.

Pfeifer, J. H., Lieberman, M. D., & Dapretto, M. (2007). "I know you are but what am I?": An fMRI study of self-knowledge retrieval during childhood. *Journal of Cognitive Neuroscience*, 19, 1323–1337.

Tabibnia, G., Satpute, A. B., & Lieberman, M. D. (in press). The sunny side of fairness: Preference for fairness activates reward circuitry (and disregarding unfairness activates self-control circuitry). *Psychological Science*.

