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APA AWARD

Award for Distinguished Scientific Early Career Contributions to Psychology: Brian A. Anderson

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Citation

"For his outstanding and pioneering work on the role of learning in automatic attentional biases. Brian A. Anderson's development of methodologies to study attentional capture by stimuli associated with reward gave rise to the popular idea of an overarching learning-dependent mechanism of attentional control referred to as 'selection history.' His programmatic and prolific exploration of these phenomena using both behavioral and neuroscientific methods has revealed multiple independent learning mechanisms influencing attentional control. A tireless, creative and dedicated researcher, his work has important translational implications for behavioral health and our understanding of addiction."

Biography

Brian A. Anderson was born and raised in a fishing village in rural Maine called Tenants Harbor. His childhood and adolescence were quite unpleasant. From before kindergarten until about age 19, he struggled severely with mental illness. A powerful imagination and an unusual ability to visualize ideas came at a substantial cost. By day, he would tangibly experience—see, hear, and feel—the darkest things his mind could conjure up, and those things then tormented him in his sleep; it was a relentless, daily battle. By the sixth grade, Brian's formal education came to a halt and he spent the remainder of his youth between inpatient and outpatient mental health facilities. For years, he prayed he would die so the pain could finally end, but consistently stopped short of suicide for reasons that God only knows. Through it all, he had the steadfast love of his parents, brother, and extended family; Brian quickly learned that this was highly unusual for someone in his situation, and never took it for granted that his family never gave up on him even when their love became costly.

For Brian, recovery was a gradual process of learning to psychologically ground himself in the world outside of him. It is hard to point to any one moment of healing. It took a village, with over 20 instrumental people. Brian has been symptom-free for nearly two decades now, and to him, his youth remains a humble reminder of the fact that he is simply fortunate to have survived this long.

Brian has a somewhat poetic history with Johns Hopkins University (JHU). Following a routine standardized test for elementary students, he received a letter from their Center for Talented Youth (CTY) inviting him to take another test. This was in the fourth grade. Brian had never heard of JHU before, but the letterhead looked impressive. He put on his "nice" clothes and took their test, but all Brian really learned that day was that he was out of his league. Those other potentially talented kids had their lives together and could dress the part too. But Brian saved the invitation, and in some of his darkest hours it offered a glimmer of hope that maybe there was something in his troubled mind worth fighting for.

By age 19, Brian had all but forgotten about JHU and CTY. He was just happy to finally be recovering. But JHU somehow maintained his contact information (despite obtaining it well before electronic records were mainstream) and mailed him a giant recruitment and application package. By that time, Brian had the functional equivalent of maybe a seventh-grade education. To Brian, the package

was a stark reminder of what his opportunities might have otherwise looked like without a history of mental illness. Without hesitation, the package went straight into the trash.

Brian genuinely tried hard at a couple of manual labor jobs: janitorial and landscaping (lawnmowing), but was frankly just bad at them. Feeling quite the failure and wary of the prospect of unsuccessfully maintaining yet another such job, he applied to college instead. Brian's grandfather was only ever able to attend a couple of college classes, but always spoke of how impactful the experience was for him and how much he wanted Brian to have that kind of experience. There was a little satellite campus for the University of Maine at August (UMA) that was operated out of an old community center about a 10-minute drive from Brian's home, so he figured he would give that a try.

The acceptance rate for UMA was reportedly over 99%, but to be less than 100%, someone has to be rejected. That much was obvious to Brian, because he was rejected from the 4-year degree program to which he applied. But he could still take classes. Brian signed up for only two classes his first semester, figuring that someone like him could never handle a full course load. He was dumfounded when he got an A in both classes. Doubting that would be replicable, Brian only increased his load by one course in the spring, but it happened again. His prior struggles with psychosis had made him fascinated with how perception works, so he studied psychology.

Wary of his very limited prior education, UMA had Brian take a basic proficiency exam to see whether he should take more remedial courses first. To everyone's surprise, the test recommended that he challenge out of English 101 instead. That recommendation sounded laughable to Brian, but when he discovered that you could take a test to challenge out of a course for around $50 versus $369 to actually take the course, he successfully challenged out of every course he could (10 total) just to save money. It never really made any sense, but it worked. He wound up graduating with a baccalaureate degree in 3.5 years.

By the time he was poised to graduate, Brian started to wonder if attending JHU was not so far-fetched. The problem was, although he had a near-perfect grade point average (GPA), he had basically no research experience and a nontraditional education at a not-so-elite school. Every PhD program to which he applied rejected him, including his "safety schools," with JHU being the last rejection letter to come in the mail. As Brian threw that letter away, he remembered that old JHU recruitment packet and wondered if he should not have just left his aspirations in the trash with it.

Within the hour, though, he set out trying to find any masters programs that were still accepting applications. If there is one good thing a history of severe mental illness teaches, it is perseverance. Unsurprisingly, a bunch more rejection letters ensued, but Brian did receive two acceptances this time, one of which was from Villanova University. Brian later learned that Villanova had an unusually low yield that year—a high proportion of the people they offered to received and accepted other offers—so Villanova's loss was his opportunity.

Attending Villanova was a huge risk for Brian. He had never been without a support structure, which with his history loomed large. He was also of meager financial means. Unable to afford his own apartment, Brian rented a room in someone's house. He wore the tires of his old car down until they literally ripped open. His dinners routinely consisted of about-to-expire food that he could purchase for next-to-nothing—an inability to procure such food that evening usually meant skipping dinner. Villanova had a perception scientist in Chip Folk, so Brian enthusiastically started working in his lab almost immediately. Although Chip's research was the reason, Brian could not help but find it an intriguing coincidence that Chip received his PhD from JHU.

Following the spring semester, Brian went home to Maine basically out of money. He had survived the first year, but tuition for the second was going to be too much to bear (he was unaware that student loans existed). While contemplating his grim financial prospects, he received notification that Villanova was completely funding tuition for his second year and even paying him a stipend. Brian was in disbelief; he never told a soul about his financial situation and Villanova could have easily used those funds to recruit a new and promising candidate. Unbeknownst to the folks at Villanova, that decision probably saved Brian's education journey then and there.

Brian met his wife, Juliene, at Villanova. They have been married for over 12 years and Brian is still coming to appreciate the depth of her love and commitment. They have a 6-year-old son Isaac.

With a master's degree and the recommendation of Chip Folk, Brian ultimately did gain entry into JHU. JHU was the only elite school that even interviewed Brian, so it was pretty obvious that Chip's recommendation was the difference-maker. Steven Yantis, Brian's PhD advisor, was like a second father to him. Steve's example of sacrificial mentorship affected Brian deeply. In his first year as a graduate student under the gentle but firm guidance of his mentor, Brian laid the foundation for the discoveries that have defined his academic career and ultimately led to this award.

Tragically, Steve passed away from brain cancer hardly a month after Brian defended his dissertation. Mental illness had delayed Brian's journey to JHU, but he apparently got there just in time. Walking alongside Steve through the end of his life and career was both personally fulfilling and absolutely heart-wrenching for Brian.

Brian remained at JHU as a very nontraditional "postdoc" essentially managing Steve's lab. He was the most senior

lab member remaining and there were two younger students who needed to graduate. When everyone else had graduated, Brian's time had come to turn the page. He began work as an Assistant Professor at Texas A&M University in 2016 (his only job offer). Brian has been very happy with the opportunities that he has had to conduct research at Texas A&M and his colleagues and lab team are fantastic, so it has been an overall pleasant chapter in the story of his career.[1]

[1] This is an open and transparent biography, written in the third-person in accordance with the formatting requirements of the journal. I am no stranger to the stigma that comes with a history of mental illness, and in that respect I am not naïve about the risk I am taking in writing this so honestly. I could have spun a very carefully angled accounting of my life that would have made me sound like I always had it together and was only ever a champion student brimming with success, but that would have simply been a misrepresentation. As the exclusivity of academia comes under increasing scrutiny, it seemed like now was the right time to finally let my guard down and just be honest. The chain of events that built the ever-precarious bridge I have walked was nothing short of extraordinary. Logically, I should have never made it this far in academia, multiple times over. I am hoping that something far less miraculous will be required for those who follow and similarly lack the benefit of a traditional academic pedigree and/or face the barriers of a disability—either historical or current—that doesn't define their intellectual potential.

Selected Bibliography

Anderson, B. A., Laurent, P. A., & Yantis, S. (2011). Value-driven attentional capture. *Proceedings of the National Academy of Sciences of the United States of America*, *108*, 10367–10371. https://doi.org/10.1073/pnas.1104047108

Anderson, B. A., Faulkner, M. L., Rilee, J. J., Yantis, S., & Marvel, C. L. (2013). Attentional bias for nondrug reward is magnified in addiction. *Experimental and Clinical Psychopharmacology*, *21*(6), 499–506. https://doi.org/10.1037/a0034575

Anderson, B. A., Laurent, P. A., & Yantis, S. (2014). Value-driven attentional priority signals in human basal ganglia and visual cortex. *Brain Research*, *1587*, 88–96. https://doi.org/10.1016/j.brainres.2014.08.062

Anderson, B. A., Folk, C. L., Garrison, R., & Rogers, L. (2016). Mechanisms of habitual approach: Failure to suppress irrelevant responses evoked by previously reward-associated stimuli. *Journal of Experimental Psychology: General*, *145*(6), 796–805. https://doi.org/10.1037/xge0000169

Anderson, B. A., Kuwabara, H., Wong, D. F., Gean, E. G., Rahmim, A., Brašić, J. R., George, N., Frolov, B., Courtney, S. M., & Yantis, S. (2016). The role of dopamine in value-based attentional orienting. *Current Biology*, *26*(4), 550–555. https://doi.org/10.1016/j.cub.2015.12.062

Anderson, B. A., & Halpern, M. (2017). On the value-dependence of value-driven attentional capture. *Attention, Perception & Psychophysics*, *79*(4), 1001–1011. https://doi.org/10.3758/s13414-017-1289-6

Anderson, B. A., Kuwabara, H., Wong, D. F., Roberts, J., Rahmim, A., Brašić, J. R., & Courtney, S. M. (2017). Linking dopaminergic reward signals to the development of attentional bias: A positron emission tomographic study. *NeuroImage*, *157*, 27–33. https://doi.org/10.1016/j.neuroimage.2017.05.062

Anderson, B. A., & Kim, H. (2018). Mechanisms of value-learning in the guidance of spatial attention. *Cognition*, *178*, 26–36. https://doi.org/10.1016/j.cognition.2018.05.005

Kim, H., & Anderson, B. A. (2019). Dissociable components of experience-driven attention. *Current Biology*, *29*(5), 841–845e2. https://doi.org/10.1016/j.cub.2019.01.030

Anderson, B. A., & Britton, M. K. (2020). On the automaticity of attentional orienting to threatening stimuli. *Emotion*, *20*(6), 1109–1112. https://doi.org/10.1037/emo0000596