

Noticing Our Assumptions

The neuroscience of our thought patterns



► WHAT SHAPES SOMEONE'S THOUGHTS ABOUT OTHERS?

Our thoughts are shaped by assumptions we automatically and unconsciously make. They impact how we feel, behave, and think. They can be positive or negative and are formed by our environment and experiences—a combination of nature and nurture.

► I BELIEVE IN TREATING EVERYONE FAIRLY. I TRY TO BE KIND—NO MATTER WHAT. I'D NEVER JUDGE SOMEONE.

Assumptions are automatic and incredibly fast! Research suggests that our brains process information about race, age, gender, and emotion within TWO HUNDRED milliseconds of exposure. They are universal, meaning everyone has them—without exception.

► OKAY, BUT HOW DOES THAT WORK?

Our brains constantly absorb information and organize it. To quickly process incoming data, the brain creates different frameworks—like buckets. The way our brains sort experiences and people depends on a complex interaction of context, familiarity, upbringing, values, and beliefs. Sorting is also shaped by our social interactions and community networks, especially those that make us feel safe and accepted. Negative experiences create buckets which signal danger. This is especially true for experiences that activate our alarm center—the part of the brain that registers fear, humiliation, threat, and rejection. Sometimes a person, place, or experience gets put into a danger bucket incorrectly, even without our realization.

► SO MY AUTOMATIC THOUGHTS MIGHT NOT MATCH MY BELIEFS OR VALUES?

Exactly! Sometimes our automatic thoughts do not match our current values or how we WANT to think. Luckily our brains are incredibly adaptable. Over time, we can retrain our brains and shift those assumptions.

► YOU SAID I CAN RETRAIN MY BRAIN, WHAT DOES THAT MEAN?

Growth, learning, and change can happen. The most important thing is to commit to the process. Check out this [interactive exhibit](#) as a great place to continue your journey. Just like training our bodies, retraining our brains can be stressful and sometimes exhausting, so we often avoid it. Studies show that when we learn to manage that stress—thereby adjusting the brain's alarm system—we can reform our brains to understand our environments more accurately. This helps us make connections with people who are different from us—find things in common and build relationships. Over time, these practices work together to help us challenge and change our automatic thoughts to better reflect our values and beliefs. Assessments like the implicit association test (IAT) can help us reflect on our automatic beliefs, increasing our understanding so we can make positive changes. These tests are not diagnostic, but offer an opportunity to reflect.



I DID THEN WHAT I KNEW HOW TO DO. NOW THAT I KNOW BETTER, I DO BETTER.*(attributed to Maya Angelou)*

REFERENCES: Hu, X., & Hancock, A. M. (2024). State of the science: Introduction to implicit bias review 2018-2020. The Kirwan Institute for the Study of Race and Ethnicity. <https://kirwaninstitute.osu.edu/research/state-science-introduction-implicit-bias-review-2018-2020>