Chrysalis

Neuroscience of Bias

Bias is a natural, reflexive response that can be mitigated by learning to pause and consider alternatives. Intentional training over time enables a diverse workforce to become an inclusive, productive workgroup.

By Janet B. Reid, Ph.D.

Abstract

Representational diversity in hiring is a great start for any organization seeking to take advantage of high-performance teams. Tapping into a team's powers of problem-solving and collaboration also requires a culture of inclusion: a workplace characterized by all employees feeling a sense of belonging.

Some people are naturally inclusive, but most are not. Experience shows us that structured exercises can challenge us to pause automatic bias and adopt a curious mindset. This paper explains the neurobiology of bias, how our brain can be "rebooted" and why creating a culture of intrinsic inclusion is an important contributor to success for organizations.

Bias is a Natural Mechanism

A recently popular acronym, "DEI" refers to an organizational climate of Diversity, Equity and Inclusion. "Diversity" refers to similarities and differences among employees. "Equity" addresses processes that fairly equip all employees for success. Employers can control Diversity and Equity with policies, but "Inclusion" is a different thing altogether.

Inclusion refers to cultures where talents, skills and perspectives of every employee are welcome contributions and viewed as critical to a team's success. However, inclusive workplaces depend on each person to adopt attitudes that may run contrary to built-in biases of which we may not even be aware.

Our brains' protective reflex to seek safety in sameness served a purpose when early man relied on tribe members for survival. This natural inclination is still evident today when one enters a room of strangers with plans to network. Our bias reflex draws us to people who appear to be most like ourselves based on outward traits like gender, race, age, build, dress, assistive devices and language or accent. Humans need connection and trust to thrive, and we gravitate toward people who we think will accept us – our "in-group."

Most of us behave more relaxed and open within our in-group. Being around similar people reinforces our thinking, and our comfort-seeking brain experiences less stress when there are no challenging perspectives. Routine tasks can be accomplished quickly in this environment, but innovation and problem-solving can be starved by a dearth of unique points of view. By contrast, "out of the box thinking" is ignited when diverse backgrounds and perspectives fuel creativity and contribute to decision-making.

Multiple Dimensions of Differences and Bias

Just as our individuality develops in dimensions – internal traits, external experiences and organizational classifications – so does our unique set of biases. Bias is an automatic reaction to both inherent and learned preferences such as food, music and status.

Curious and adventurous personality types are intrinsically more inclusive when outside of their in-group and may pause their reflexive responses to act more deliberately. Most people are unaware of instinctive preferences – unconscious biases – and may not recognize bias as a factor in their behavior. This is referred to as "implicit bias."

The good news is this: We can learn to disrupt automatic thoughts and consider new information. Empirical data strongly indicates we can grow new neural pathways for greater neural flexibility and cognitive function. With motivation and opportunity, people can develop a mindset of curiosity and intrinsic inclusion. Biases will always exist, but mental exercises changing how we think, feel and act will change our relationships and professional performance.

Understanding Neurobiology

There are chemical reasons we feel comfortable when surrounded by our in-group. When a brain registers trust, it releases oxytocin – often described as the social-bonding hormone. Alternately, distrust produces the "fight-or-flight" hormone epinephrine, which causes a state of high alert and prepares us to be aggressive.

This is true not only in public or a room full of strangers, but also in a workplace or classroom where we work or learn every day. Work and school environments carry expectations of focus and performance. Both are difficult when a person is under stress.

Although built-in bias triggers chemical responses for either bonding or social anxiety, neurobiology research is beginning to show that our brain can be retrained to reduce stress caused by bias and become more comfortable with inclusion.

Neuroplasticity is the ability of our brain to form, organize and reorganize synaptic connections. A child's mind is very plastic and susceptible to new input, but even developed brains can form new synaptic pathways when challenged. Dramatic examples include therapies that help victims of stroke or traumatic brain injuries improve memory, cognitive function, speech and even regain use of paralyzed limbs.

"The brain doesn't really change unless you challenge it," neuroscientist Dr. Lisa Kreber of the Centre for Neuro Skills writes in *What is Neuroplasticity?*[1] "Any task that is familiar, automatic or easy does not challenge your brain, but activities that are difficult and challenging for your brain elicit changes in the neural network."

Enhancing synapsis formation and neural flexibility has become an industry itself. One example includes brain training programs to mitigate learning difficulties and slow progression of Alzheimer's disease. Cognitive behavior therapy and other psychology techniques help people disrupt automatic thoughts to control anxiety and its effects. Sustained, intentional experiences that cause a person to pause and challenge automatic bias also stimulates new connections and thought habits.

A structured group process focused on pausing implicit bias can improve not only each participant's neural flexibility; it can help build relationships, boost productivity and bridge a social divide.

Tackling Bias in Today's Environment

Bias takes a destructive turn in society's "Us vs. Them" tribalism. It can be seen today among political, religious, racial, ethnic, gender, and sexual identity groups. Social media algorithms reinforce silos of in-group thinking and behavior by feeding a continuous flow of biased ideas.

Comments and videos posted online suggest people may be increasingly uninhibited with derogatory words and actions in public. Even when behavior is controlled, quieter expressions of micro-aggressions and micro-inequities are damaging.

Micro-aggressions and micro-inequities are subtle, often unthinking actions of unconscious or implicit bias, in which someone is minimized or treated differently. A micro-aggression could be body language, a facial expression or a comment that plays off a stereotype. It may not be intended to be hurtful, and both micro-aggressors and recipients may be unaware of a subtle impact. Yet each barb erodes a person's sense of value and belonging. Accumulating micro-aggressions across an organization create an unwelcoming atmosphere with substantial impact on people and performance.

Dr. Steven Spencer, professor of social psychology at The Ohio State University, says "stereotype threat" comes from "being both vigilant for the possibility that somebody is stereotyping you and, at the same time, not wanting to give credence to the stereotype."[2] Such intense stress inhibits creativity and performance.

People camped in tribal silos personify what Dr. Ryan Hays, executive vice president of the University of Cincinnati, calls a "knowing" mindset. A person with a knowing mindset is certain: "I know Group A is like this and Group B is like that." Breaking out of internet echo chambers and opening discussion requires a "learning" mindset, such as, "My experience is this, but let me find out more."

Sustained, intentional exercises can help people develop curiosity needed for a learning mindset. By providing such opportunities, employers can help heal social divides within an organization and take DEI efforts from a starting point of diverse headcount to a culture of intrinsic inclusion.

The difference is belonging: In one, a quota is met. In the other, diverse groups of individuals learn to recognize and overcome innate bias, then trust and empower each other.

Disrupting Bias and Rebooting Brains

Those who feel stereotyped and misunderstood have long felt others should "walk a mile in my shoes." It might be more useful to walk a mile ***WITH*** that person. When bodies move together, multi-sensory motor syncing helps them build empathy and trust. Walking side-by-side also creates an opportunity to talk without triggering eye contact anxiety.

Of course, walking a mile isn't always practical – or even possible for some people. There are several more inclusive exercises that can be accomplished in less time and space with a similar effect. They all begin with acknowledging that bias is innate in everyone. But change cannot occur without motivation.

The MODE theory gives us a methodology for gaining control over our thought processes and their outcomes. Dr. Russell Fazio of The Ohio State University and Dr. Michael Olson of the University of Tennessee considered the question and found that "motivation and opportunity can be determinants of spontaneous behavior" – their theory known as the MODE model.[3]

Dr. Fazio refers to MODE as a "gating mechanism." Dr. Fazio refers to MODE as a "gating mechanism." With enough motivation and the opportunity, our brains can shut the gate on or interrupt an automatically activated attitude. This allows new ideas to inform deliberate decisions and actions.

Motivation is any incentive that causes a person to think about outcomes. An emotional event or significant relationship quickly creates powerful motivation, but smaller bonding activities also help manufacture motivation.

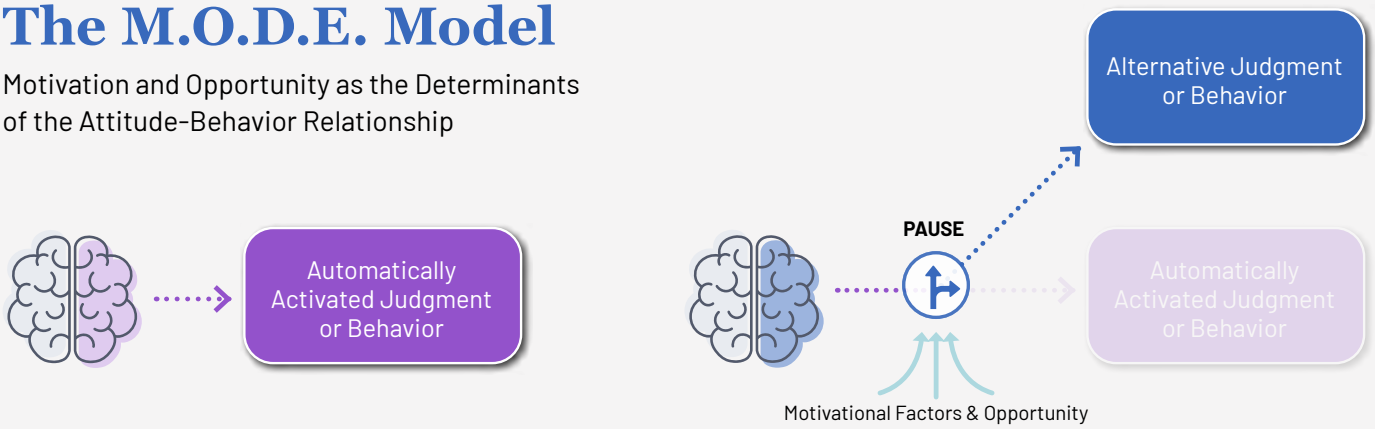
Opportunity can be defined as "people having the resources" to think clearly and consciously, which requires that they aren't tired, hurried, hungry, feeling stereotyped or distressed in other ways. Such stressors are empathy blockers. Even if the motivation is there, our brains won't have energy to pause an automatically activated attitude.

When there is motivation and opportunity, a deliberate pause has power to stop automatic reactions, allowing our brain to consider biases and new information, then control decisions.

Intrinsic Inclusion™:

The M.O.D.E. Model

Motivation and Opportunity as the Determinants of the Attitude-Behavior Relationship



A Map for the Journey to Inclusion

The Chrysalis Coalition of seasoned and devoted corporate DEI consultants has developed a methodology to help DEI change leaders deliver lasting transformation to their organizations. The program uses science and technology to engage employees across an organization and accelerate a change in mindset and culture to intrinsic inclusion.

To learn more, contact us to schedule a free consultation.

Contact the Chrysalis Coalition:

- *https://chrysalis-dei.com*
- *connect@chrysalis-dei.com*
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Additional Resources

This is the first in a series of white papers exploring the science and benefits of rebooting our brains from automatic bias to intrinsic inclusion. Culture change begins as a purposeful program in workplaces everywhere, building a strong sense of belonging and resulting in greater productivity, employee retention and profitability. Those who learn to be intrinsically inclusive take this mindset home from work to relationships in their community and beyond.

Research for this whitepaper initially informed the book, *Intrinsic Inclusion: Rebooting the Biased Brain*, by Dr. Janet B. Reid, Ph.D., and Vincent R. Brown.

- ***Order Intrinsic Inclusion:*** *Rebooting the Biased Brain*
- ***Resources named in the book can be found at*** *www.intrinsicinclusion.com*

About the Author

Dr. Janet Reid, co-founder of the Chrysalis Coalition, is an innovative thought leader who is passionate about implementing DEI transformation in corporations, healthcare organizations and institutions of higher education. For more than 30 years, Dr. Reid has helped clients in more than 40 countries build organizational capacity, innovation and market share. Curious why some people are more intrinsically motivated than others to surround themselves with diverse people and ideas, Dr. Reid began exploring emerging neuroscience and social psychology research. Knowledge she gained is detailed in *Intrinsic Inclusion: Rebooting the Biased Brain*. She and co-author **Vincent R. Brown** then collaborated with Rali Founder and Chief Transformation Officer **Larry Mohl** to create the Chrysalis Coalition methodology and program.

[1] What is Neuroplasticity? | CNS TBI Rehabilitation (neuroskills.com)

[2] Steven J. Spencer, Four Prejudice Paradigms that Interface with Neuroscience, presented at the Neuroscience of Diversity and Inclusion Workshop, Columbus, OH, 2016.

[3] Russell H. Fazio and Michael A. Olson, "The MODE Model: Attitude Behavior Processes as a Function of Motivation and Opportunity," in Dual Process Theories of the Social Mind, ed. J.W. Sherman, B. Gawronski, and Y. Trope (New York: Guilford Press, 2014), http://faculty.psy.ohiostate.edu/ fazio/fazio/documents/FazioOlson_DualProcessVolume__Feb062013.pdf.

