

choice

the magazine of professional coaching

NEUROSCIENCE & COACHING:

*Separating myth
from reality*



Neuroscience & Coaching

SEPARATING MYTHS
FROM REALITY

What's the truth about neuroscience and coaching? What are the biggest neuromyths? How do you coach neurodiverse clients? What has changed in neuroscience and coaching with the new understanding of the brain? What is the future of coaching as it relates to neuroscience? Join us as we explore how the latest science of the brain impacts our profession.



THE NEUROSCIENCE OF SUSTAINABLE CHANGE

How coaching accelerates learning and growth

By Marcia Reynolds, PsyD, MCC



For decades, behavioral scientists have researched the impact of our cognitive blind spots. Most agree you don't actually know when you don't know what you're talking about. What you define as true in the moment is a mash-up of past experiences that provide an immediate explanation for what is occurring.

Psychologist Dan McAdams of Northwestern University said old goals, obsolete values and outdated self-perception are the “core planks of a life narrative” that give you a false sense of security.¹ You may even be aware that your stories do not support your best interests, but they provide the safety of certainty. As family therapist Virginia Satir said, “People prefer the certainty of misery to the misery of uncertainty.” The brain prefers self-preservation over self-actualization.

If you attempt to question your perceptions on your own, you are likely to revert back to your original beliefs and accept them as accurate descriptions of the present moment. “Wrong never feels wrong in the moment,” wrote journalist Kathryn Schultz, author of *Being Wrong: Adventures in the Margin of Error*. “We know what it feels like to have been wrong in the past ... but not what it feels like to be wrong in the present.”

Add the fallibility of your perceptions to the unreliability of your memories, and it can be dangerous to rely on self-reflection to make decisions when you are not certain of the outcome, especially if the impact of choosing incorrectly could be harmful.

Seeking advice and feedback can be as ineffective as self-reflection. You may trust someone's knowledge and expertise, but the situations they have

faced are not replicas of your current situation. If you don't blend their advice with creative insights you discover, you will either comply or dismiss the ideas without much thought.

A study done in April 2022 recorded activity in the regions of the brain associated with problem solving. They studied three different approaches with each participant:

1. Solitary sorting,
2. Receiving direct opinions and advice, and
3. Non-directive coaching using reflections and open-ended questions.

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Not only did the study demonstrate that approaches #1 and 2 generated very little brain activity, but the coach approach activated very high activity in the region of the brain associated with creativity. The participants generated far more insights and aha moments that enhanced their problem-solving capacity. They also demonstrated more excitement than when they tried

figuring something out on their own or when they received suggestions.²

The study confirmed that when you coach a person's thinking instead of advising, mentoring or giving them quiet time to think, the creative insights that emerge accelerate the change process. People not only see new ways to proceed, but then act with more confidence and sustained commitment when they design actions in a coaching conversation.

HOW COACHING OVERRULES THE PROTECTIVE BRAIN

Neuroscientist Michael Gazzaniga, author of *Who's in Charge? Free Will and the Science of the Brain* said that sorting out options and obstacles with an external thought disruptor – someone who reflects words, expressed emotions, and contradictions – lets people detach and view their stories as if they were a movie to be observed and analyzed.

An external thought disruptor uses concise reflective statements and curious questions that stimulate examination of the thinking patterns directing decisions. The insights gained from external thought disruption override the protective brain, allowing conscious and willful decision-making.

The coach as a thought disruptor starts by listening for main ideas and rationalizations holding together the pieces of the client's story. Simply ask-

ing what key words and phrases mean to the client begins the restructuring process that could transform their thinking. Defining and explaining the words they use brings clarity, understanding, and often an instant and major alteration in the perceptions of the situation and of themselves.

John Dewey, author of *How We Think*, said, “Provoking people to think about

their thinking is the single most powerful antidote to erroneous beliefs and autopilot.” The insights generated when using reflective inquiry in coaching facilitate both effective decision-making and increased self-confidence. People are more likely to try new behaviors even when risks are real.

THE SIMPLICITY OF COACHING IS PROFOUND

I often say, “Thinking is the enemy of the coach.” Practice receiving and offering back summaries of what they express with as little interpretation as possible. You may offer a phrase you think encapsulates what they think is holding them back, starting with the words, “It sounds as if...” but you offer these statements for their review. You may be wrong. Even declining your offer because it’s not correct helps them look more deeply into their thoughts.

Stay curious. Never assume you know what others mean when they tell you what they see and feel. They must verbalize the meaning of their words in the context they present so you can both observe what they see and think.

Once they see what steps they can take to move forward, ask them when they will implement the step they declared and what will they do if the result isn’t quite what they hope for. They now know what to do and also how to handle disappointment as a part of their growth.

BRINGING IDENTITY AWARENESS INTO THE CONVERSATION

Effective coaching is identity based, expanding both the client’s perception of a situation and how they see themselves in relation to this situation. They may say they are a leader, but when explaining why they don’t speak up in their leadership team meetings, they may add, “I’m the youngest, least experienced leader in the room.” How they define themselves could lead to a fear of rejection or they think they will be judged as arrogant or an imposter.

Changing their behavior requires that they explore their sense of self and how else they might define themselves in their situation.

Often, self-concept is formulated and enshrined by the word, should. Shoulds come from what they think their family, friends, colleagues, and society want them to be. Blindly living up to shoulds may be the source of their discontent, irritation, or emptiness.

Once perception of the situation is clarified and the client has envisioned a desired outcome, ask them to describe how they see themselves in the situation today. You can use the questions in the sidebar to prompt their thinking about the person they think they are in the moment and what redefinition of self would support their success.

In coaching, goal achievement is often the result of increased self-awareness and personal transformation.

Your Mindset Impacts Their Growth

Maintaining your presence and curiosity is more important than performing perfectly. Your caring curiosity provides the safety they need to examine their thinking. Their insights may trigger an emotional response.

When people see with unfiltered clarity how their perceptions have impacted their life, it can be an upsetting experience. Yet an uncomfortable realization is often an indication that a new awareness is forming. When you give people a moment to process what they now see with kindhearted silence, their emotional reaction will subside. When you sense they are settling down, you can ask them if they would share what they now see.

Painful, embarrassing and heart-wrenching realizations may be inevitable, but when the coach embodies a caring but non-reactive mindset, most people feel lighter and more optimistic at the end of the session. ●

REFERENCES

- 1 Dan McAdams, “The stories we tell about ourselves: understanding our personal narratives,” northbynorthwestern.com/the-stories-we-tell-about-ourselves/
- 2 Bartolomé G., Vuka S., Nadal C. and Blanco E. “Right cortical activations during generation of creative insights: An electroencephalographic study of coaching.” *Frontiers in Education*.

TRANSFORMATIVE QUESTIONS

Here are some questions to help you (and your clients) explore **WHO YOU ARE TODAY** and **WHO YOU CAN BECOME**:

- 1 Looking at a current challenge, who do you see yourself being in this situation, such as a leader, team member or parent?
- 2 What adjective describes who you are in the role, such as youngest, least experienced or most knowledgeable?
- 3 What adjective describes how you feel, such as clueless, angry, resigned, excited or scared?
- 4 Who do you think you should be, such as the wise one, team advocate, responsible guide or equal contributor?
- 5 What would you like to see happen instead of what is happening now? (Don’t add the word “but” to your description. Paint a picture that works best for you.)
- 6 When looking at this vision, who are you at your best? How do you think, act and feel? Don’t be afraid to imagine what feels fulfilling and successful.
- 7 Now go back to how you define yourself today. What is shifting as you see who you can become? Is there anything holding you back? Can you take small or large risks to try out the new identity you want to live into?
- 8 Could any fears impact your transformation? What is most important to you that is worth moving forward with the change you want to make, even if you are afraid? If you can’t start shifting today, when can you begin to make this shift?