

What Do Neuroplasticity and Hypnosis Have to Do with Each Other?

You really want to know?

OK, time for a little background here.:)

What is Neuroplasticity?

Neuroplasticity the brain's ability to be flexible and to rewire in response to experience.

As a field, it is the study of how experience and/or self-directed attention can create physical, structural changes in our brains. The brain is constantly changing not only in function but in physical structure! It changes itself two ways:

- 1.) By adapting to what is happening in the environment (experience-dependent neuroplasticity). Think of this as an automatic, "unconscious process" of conditioning.
- 2.) By shifting and directing our attention (self-directed neuroplasticity). This is a more purposeful shifting and directing of attention through processes like meditation, hypnosis and other types of mental training.

Neuroplasticity starts before we are born, in utero. It never sleeps. It never stops, for every moment of your life.

Believe it or not for many years experience-dependent neuroplasticity, while not new by any means, was considered to be the exception rather than the rule! It was usually limited to anecdotal accounts of astounding recoveries of stroke victims, head trauma and usually other types of physical issues.

What I was taught as a psych student back in 1978, taking physiological psychology (the name used in non-medical schools for "neuroscience") was we come from the factory with about 100 billion brain cells. That's a pretty big number, so most of us had more than we needed barring some catastrophic injury or trauma. But - and this was the big "but - that was all we got and after that there a pretty significant decline.

Additionally, the predominant belief in mainstream science for many years (much to the delight of pharmaceutical companies) was the mind was the brain

and the brain was a machine. (Schwartz, 2010) It's physical, so only "physical" things can change it. You could experience better living through chemistry, but certainly not actually change the physical structure of the brain through something as "non-physical" as attention! Just not "scientific" or profitable.

That has all changed!

With the greater accessibility of different types of brain imagery, the field of neuroscience has exploded. One expert in the field suggested neuroscience is about at the same stage as biology was about 100 years after accessibility of the microscope, 1725! (Hanson, 2010)

Now what were thought to be more aberrations or exceptions are actually more representative of how the brain works and grows. There are amazing discoveries that directly effect the fields of psychotherapy coaching and hypnotherapy, as well as how to live a happier, more productive life.

The Good News!

Remember, I said neuroplasticity can be experience-dependent or self-directed? **Well the news is about the "self-directed" part!** The physical organ called the brain can also be changed through something which is not physical at all: ***our attention.*** To keep it simple think of this way: mind = attention and brain is a physical organ in your body. (I'll give you a hint where all this is going: what does hypnosis effect: uh...attention.)

Your Mind is using your brain to change itself.

Your brain has functions like other organs in your body. The two primary functions within your brain are learning and after sufficient repetitions and/or intensity of experience. making those learnings automatic as soon as possible. Oh, by the way, kinda sounds like "the unconscious mind?" :)

The fact is your brain is constantly growing and changing - physically.

Your brain remembers to keep producing cells so you can remember. One study of terminally ill patients between the ages of 55 and 70 that the brain was still creating 500-1000 stem cells a day in the area which is the Grand Central Station for memory and learning, the hippocampus. (Begley, 2007) So much for the idea we get 100 billion from the factory and it' all down hill from there!

"Exercise" your brain's ability to grow!

Given the right circumstances, which involve voluntary exercise and repetition, these baby stem cells will become fully functioning adult neurons.

Yes, heard it right. Aerobic exercise is not only good for your muscles and body, it super charges your brain and creates a fertile field for stem cells to grow.

Furthermore, our brain is strengthening some neurons, making them physically bigger, and it's pruning others that are not relevant or those which are not useful adaptations.

In some cases, neurons are learning to fire more quickly and even becoming more or less sensitive to what triggers them. Neurons are constantly selecting and changing their connections with each other. All this is happening every moment of your life whether you are directing this or not.

***You can re-wire your brain: "Neurons that fire together wire together. "
D. Hebb, 1949!***

This is a simple, yet very accurate statement about how the brain works. For example, you see someone you love. Just the sight of this person gives you a "warm fuzzy" feeling inside. When you make associations between sensory experience and a feeling (or one concept or idea and another), neural circuits associated with each fire simultaneously (or very close to it) and begin making connections.

Depending on the intensity of the experience, duration and number of repetitions these circuits literally wire together. This happens automatically based the experiences we have but we can also direct that ourselves, too. (And guess what? Hypnosis is one of the most effective ways to create new associations as well change ones we don't want.)

Bottom line: Neurons are more like muscles in your body.

They can be physically sculpted, trained, conditioned with your attention. Additionally, there are some very specific ways this has to be done to work. There are practical principles -important ones - that give us clear direction how to make your brain work for you and therefore to live a life that is richer, more fulfilling, and more productive.

Neuroplasticity, Neuroscience and this Training

From the explosion of research like some of the examples cited above, I've been able to cull some specific and flexible techniques that will cause neurons to get bigger (physically!), fire more quickly, fire with less stimulation and connect to other areas of the brain to create more resilient positive states, behaviors and ways of BEING.

it is an exciting time! There are some very clear findings that will transform how we work with people based on what is known about the brain, that wasn't known even a few years ago.

Some of these findings support certain things you may have learned from fields like Hypnosis and NLP, others actually show where they have been wrong, and other findings will take you well beyond what is typically taught in NLP or Hypnosis certification trainings.

When I say well "beyond" I'm not talking about "woo-woo fluff stuff". I'm talking about valid and reliable findings and step-by step processes that will take your work and your life to the next level.

While physiological psychology and neuroscience have always been an interest and area of study for me, I've spent the better part of the last 7 years really delving into this area, sourcing and double-checking research. I have found some real gems. Here's just a few to give you a flavor of the feast of new information that is out there.

A few more examples about what's in it for you and what's possible.

Turn on the "fountain of youth" for the brain

Did you know there is literally a "miracle grow" for the brain? (Ratey, 2008) It's called Brain Derived Neurotropic Factor (BDNF). Do you know one simple thing that will *exponentially* increase the amount of BDNF your brain create?

OK, I won't hold out on you- it's aerobic exercise! Get your heart rate up. It's doing as much for your brain (if not more) than your heart!

Overcome fear

There is one simple thing you can do to overcome the biology of fear. (Le Doux, 2000.) Do you know what it is? Think about how important knowing that would be when working with your clients and living your life.

Have more AHA experiences

How about the brainwave pattern (GAMMA) you can learn to cultivate that will create widespread integration, well being, clarity, which can lead to more AHA experiences in your life. (Lutz, et. al., 2004) Think about how useful it would be to know to cultivate this in your clients.

Develop empathy and more accurate "gut feelings" about others

What is happening now is through PET scans is we are able to see the precise areas of the brain which light up during certain activities. Knowing what those areas we can "reverse engineer" particular exercises to activate those areas of the brain.

For example, one area called the insula (a formation in the center or the brain deep within the cortex) which has dual functions having to do with "gut feelings." It lights up when we have a strong sense of empathy and can really reel what is going on emotionally with someone else. Yet that part of the brain also lights up when we practice being more aware of our own bodily sensations.

So by *practicing greater self awareness of your own bodily sensations*, you will literally make the insula stronger, more muscular and more sensitive. The net effect: Your empathy increases and "gut reactions" about how others feel becomes more refined. (Hanson, 2011)

Overcome negativity

Did you know that the because of how our brains evolved, we have what's called "the negativity bias" to remember and experience "negative experiences" more than positive ones? Well, that's the case. It is well documented. (Rozin, Paul; Royzman, Edward B., 2001).

The short story is tens of thousands of years ago, if we were foraging for food, but paid attention and remembered scenarios that posed a threat to survival, we live to eat the next day. We may have a bad day where the threats are pretty constant. We may not have much for dinner that night, but we live to eat the next day. if we don't pay close attention to threats, have a meager dinner is a moot point!

All this means we are hard-wired toward these tendencies. So what can you do about this? There are very well documented ways to effect the functioning in the three areas that are responsible for the "negativity bias. They are: our brain stem (vital functions), the amygdala (the alarm system), and pre-frontal cortex (executive functions) which you can use in hypnosis, teach your clients and even use yourself in everyday life.

Become happier and more fulfilled

And guess what? There are clear-cut steps to how you can do based on what lights up in our brains when we are feeling happy. As mentioned in the above section our threat detection circuits had be more hard-wired.

The "feel good, happy, fulfillment" circuits are less hard-wired and need to be conditioned more, but since our brain is flexible and plastic we can develop those so we can automatically have a greater sense of well-being as we go through life..

***Learn to savor the little things in life,
but do it in a way creates more of them***

Research shows that intensity, duration, getting the body involved, and attaching personal meaning to "everyday experiences" are the critical factors for moving them from short term memory to long term memory. (Hanson, 2011)

This primes the brain so it starts looking for experiences like this automatically. In other words, it registers them more easily, smaller things produce good feelings and having more good feelings create more good feelings. Hard core scientists call this a "vicious cycle," but this one makes you feel good!

Now, multiply all this by the factor of H (HYPNOSIS)

Hypnotically Enhanced Neuroplasticity

What do you think would happen if we took all of the powerful processes from brain science and ran them through an amplifier to make them even more potent?

Now, think about how you can help others with your new combined expertise using hypnosis and proven findings from neuroscience Get the idea?

How about a little bit more about Hypnosis, John, for old times sake?

OK, Here's a few ideas for deep consideration.

Hypnosis is an exceptional, highly focused state attention wherein one gains direct access to automatic, unconscious processing.

So think about it.

Hypnosis is a state that allows you to have access to everything you do automatically. That is a lot. Think about it: direct access to your memory, emotions, urges and cravings, pleasure centers, inner workings of your decision making and judgment, healing abilities within your brain, immune and hormone regulation, and the possible list goes on and on.

***Think of it as Milton Erickson did:
Hypnosis is "a state of active unconscious learning."***

Suggestion and "Deep Thinking"

Did you every have a friend (or colleague or client) directly ask you for advice? You listen closely and when it seems like the right time you offer your take for their consideration...Before the last words are out of your mouth, your friend already is saying, "Oh that'll never work," or "Yeh, I already thought of that." It was like they hardly considered it before they rejected it.. -By the way, advice in everyday life is what is we call one type of "suggestion" in a hypnotherapy session. :) So, the "suggestion" was rejected.

Enter hypnosis...

Hypnosis enables us to consider ideas, concepts, beliefs in a way that frees us from our usual conscious restraints and limitations.

This allows us to consider what's been said with more circuits or deeper circuits that are more fully engaged in our brains We can process what's being said more creatively, in a more expansive or focused way depending on what is needed.

Additionally, it temporarily suspends what I call "the label-maker." The label maker includes parts of our dominant hemisphere which attach language to experience- and there by keep it static, fixed and often limited.

Hypnosis and hypnotic techniques temporarily suspend the label-maker, so our own raw data of sensory experience can be re-organized in a way that is consistent with how we want to be now, as opposed how we were.

My emphasis in this training is to show you how to use hypnotic principles, so you can achieve some of the same results as you would in a classic "hypnotic trance" but without the overt "trance induction" or "trance."

This gives you the flexibility to help your clients make changes in a wider variety of contexts, but still gain direct access to unconscious processing and all the benefits that go with that.

With hypnosis, hypnotic techniques, and hypnotic principles you have a set of skills that will enhance any therapeutic intervention you may use.

Of course, there is a lot more to all of this. There is always more to learn, right? But, hopefully, it's given some things to consider... deeply....

There's ALL-WAYS more to learn.

Training New Trances and Beyond

The training will give you a **strong foundation for how to use hypnosis and hypnotic principles** as well as **working knowledge of brain science**, so your work can have both precision and scope.

The combination of all these elements is truly amazing. You will be in the forefront of the **Hypnotically Enhanced Neuroplasticity**. Your future clients will thank you for it.

...And while in the future... when you think you're doing hypnotherapy with a client...helping that person with all of the skills you have... there will be times when you will marvel... at vast potential of the unconscious mind... YOURS... it's a delightful way to change. :)

Are you starting to get what Neuroplasticity and Hypnosis have to do with each other?

Take a **closer look** at the course content, prerequisites and other details to see if it's a great fit for you.

If it is, you're invited!