

Neurospiritual

The Power of Thoughts

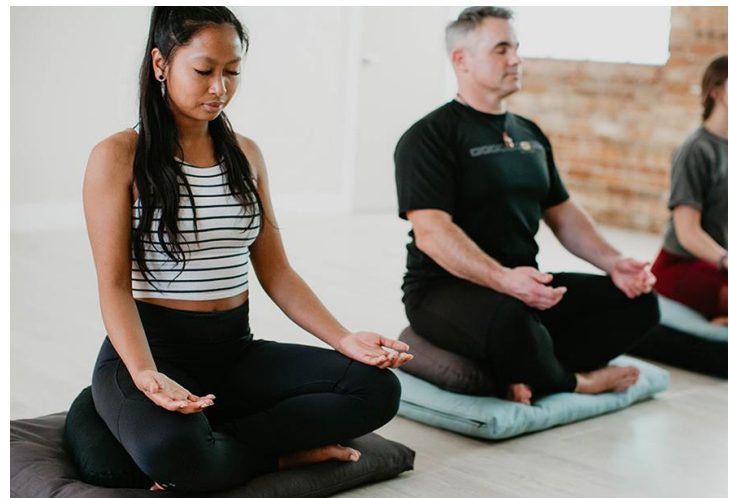


The power of thoughts has been studied at Harvard Medical School.

Neurologist Alvaro Pascual-Leone instructed a group of volunteers to practice a five-finger piano exercise for two hours a day over five days.

After a week, tests showed that the area of their brains devoted to the piano finger movements had expanded like dandelions spreading on a lawn.

However, Pascual-Leone didn't stop there. He extended the experiment to another group, asking them merely to think about the piano practice exercise without moving their fingers.



The test data showed that the same area of their brains had expanded in the same way, proving that mental practice (thought) is just as powerful as physical practice.

Dr. Brad Harrub



1. The _____ of _____ has been studied at Harvard Medical School.

power thoughts

2. After a week, tests showed that the area of their _____ devoted to the piano finger movements had _____ like dandelions spreading on a lawn.

brains expanded

3. However, Pascual-Leone didn't stop there. He extended the experiment to another group, asking them merely to _____ about the piano practice exercise without moving their fingers.

think moving

4. The test data showed that the same _____ of their _____ had expanded in the same way, proving that mental practice (thought) is just as powerful as physical practice. Dr.

Brad Harrub

area brains

The Power of Your Thoughts



“Desires” are thoughts that draw us away from God. These ungodly thoughts grow in our mind:

“...Each one is tempted when he is drawn away by his own desires and enticed. Then, when desire has conceived, it gives birth to sin; and sin, when it is full-grown, brings forth death” (James 1:14,15).

Restoration begins with our thoughts!

“But you have not so learned Christ . . . that you put off, concerning your former conduct, the old man which grows corrupt according to the deceitful lusts, and be renewed in the spirit of your mind, and that you put on the new...”
(Ephesians 4:20-24).



This experiment reveals the importance of “...bringing every thought into captivity to the obedience of Christ” (2 Corinthians 10:5).



1. “ _____ ” are _____ that _____ us away from God. These ungodly thoughts _____ in our _____:

desires thoughts draw grow mind

2 “...Each one is _____ when he is _____ away by his own _____ and _____. Then, when desire has _____, it gives birth to _____; and sin, when it is _____, brings forth death” (James 1:14,15).

tempted drawn desires enticed conceived sin full-grown

“But you have not so _____ Christ . . . that you put off, concerning your former _____, the old man which _____ corrupt according to the deceitful lusts, and be _____ in the spirit of _____ and that you put on the new...” (Ephesians 4:20-24).

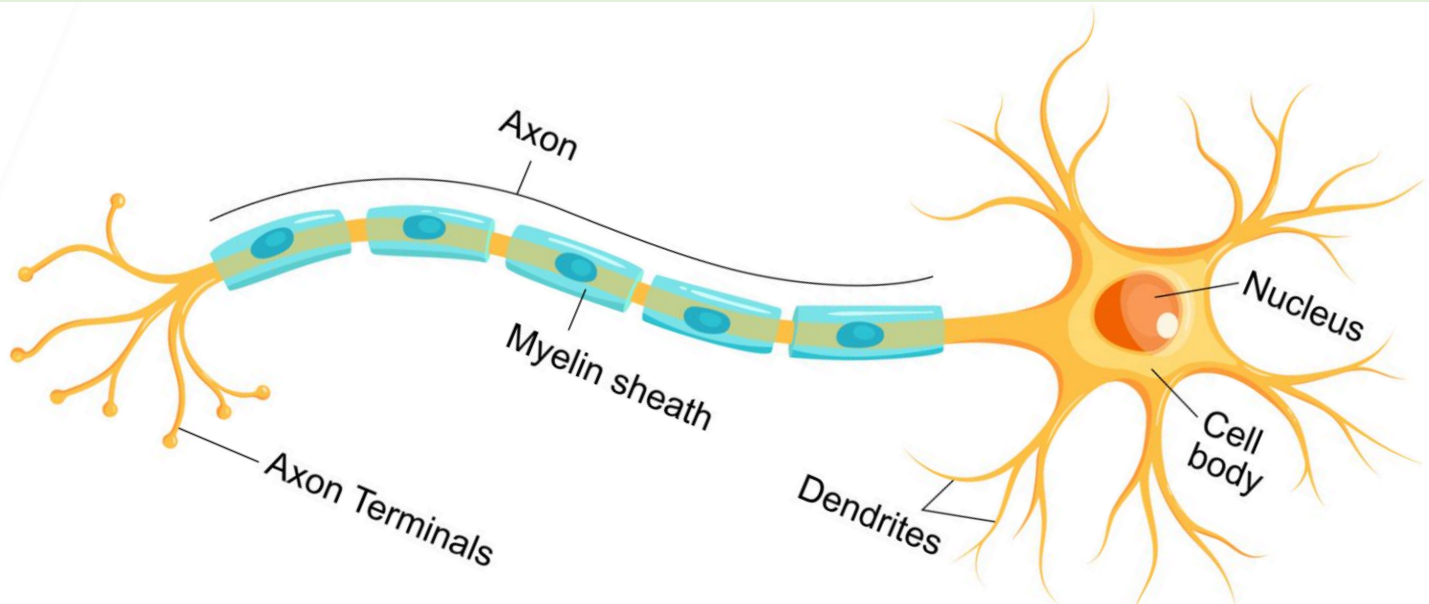
learned conduct grows renewed

This experiment reveals the importance of “...bringing every _____ into _____ to the _____ of Christ” (2 Corinthians 10:5).

thought captivity obedience

Neurons

“Neurons are the fundamental units of the brain and nervous system responsible for receiving sensory input from the external world and sending it throughout the brain and body.” (Khan Academy)



Scientists set the total number of neurons in the brain at 86 billion.

Neuron communication is like people communicating with each other. We use our mouths to speak and our ears to receive those messages.



Our voices usually convey the message between one person's mouth and another person's ears.

Dr. Tiffany Rogers

Axons function like our mouths and dendrites work like our ears.



1. Neuron communication is like _____ communicating with each other.

people

2. We use our _____ to _____ and our _____ to _____ those messages. Our _____ usually convey the _____ between one person's mouth and another person's ears.

mouths speak ears receive voices message

3. Brain scientists agree that there are _____ billion neurons in the prefrontal cortex and _____ neurons in the dopamine pathway. Scientists set the total number of neurons in the brain at _____ billion.

16 450,000 86

4. Neurons send _____ signals from one end of the neuron to the other. They send messages from one neuron to another.

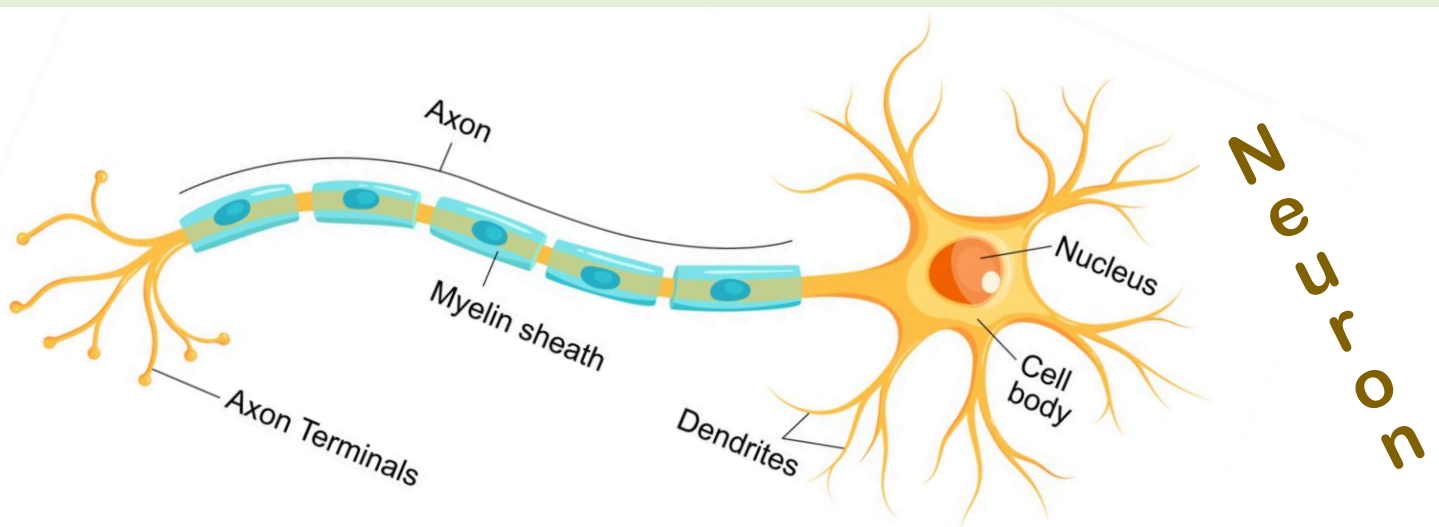
electrical chemical



Groups of numerous neurons work together to enable you to perform the “works of the flesh” or grow “fruit of the Spirit.”

“Now the works of the flesh are evident, which are: adultery, fornication, uncleanness, lewdness, idolatry, sorcery, hatred, contentions, jealousies, outbursts of wrath, selfish ambitions, dissensions, heresies, envy, murders, drunkenness, revelries, and the like...” (Galatians 5:19-21).

“...The fruit of the Spirit is love, joy, peace, longsuffering, kindness, goodness, faithfulness, gentleness, self-control...” (Galatians 5:22,23).





1. A group of numerous _____ will work together to enable you to _____ the “works of the flesh” or _____ “fruit of the Spirit.”

neurons perform grow

“Now the _____ of the _____ are evident, which are: adultery, fornication, uncleanness, lewdness, idolatry, sorcery, hatred, contentions, jealousies, outbursts of wrath, _____ ambitions, dissensions, heresies, envy, murders, _____, revelries, and the like...” (Galatians 5:19-21).

works flesh selfish drunkenness

Name three of the “fruit of the Spirit” in Galatians 5:22,23 that you struggle with?

Your brain has 86 billion neurons. Our study is limited to the role neurons play regarding dopamine (motivation) and neuroplasticity (learning new skills).



An easy way to think of how neurons send and receive signals is to imagine baseball players playing catch. Each player represents a neuron. The baseball, as it is sent toward its intended destination, represents a dopamine message travelling from one neuron to another.



Axon

One end of the neuron (dendrite) receives a chemical message from another neuron (axon).

That dendrite then sends an electrical signal to its opposite end of that neuron.

Then the axon sends a chemical signal to another neuron (dendrite).

This happens at high speed, as neurons work together as a group sending & receiving messages.

Among many other tasks, the neurons work together to activate your dopamine pathway and to perform neuroplasticity, as new skills are learned and perfected.



Dendrite



1. ur brain has ____ Billion Neurons. Our study is limited to the _____ chemical messages and the neurons that carry out _____ (learning new skills).

86 dopamine neuroplasticity

2. An easy way to think of how neurons send and _____ signals, is to imagine baseball players _____ a _____ around the field.

receive throwing baseball

3. Each player represents a _____.

neuron

4. The baseball _____ a dopamine message as it is _____ from one _____ to another.

represents sent neuron

5. One end of the neuron (_____) receives a chemical message from another neuron (_____).

dendrite axon

6. That dendrite then sends an _____ signal to its opposite end (axon).

Electrical

7. Then the axon sends a _____ signal to another neuron (dendrite).

chemical

This happens at high speed as a group of numerous _____ work together.

neurons

8. Among many other tasks, the _____ work together to _____ your dopamine pathway and to perform neuroplasticity, as new skills are _____ and perfected.

neurons activate learned

Numerous neurons work together in groups to perform spiritual tasks like these!



“But also for this very reason, giving all diligence, add to your faith virtue, to virtue knowledge, to knowledge self-control, to self-control perseverance, to perseverance godliness, to godliness brotherly kindness, and to brotherly kindness love. For if these things are yours and abound, you will be neither barren nor unfruitful in the knowledge of our Lord Jesus Christ.” 2 Peter 1:5-8



Axon

“This I say, therefore, and testify in the Lord, that you should no longer walk as the rest of the Gentiles walk, in the futility of their mind, having their understanding darkened . . . who, being past feeling, have given themselves over to lewdness, to work all uncleanness with greediness. But you have not so learned Christ . . . put off, concerning your former conduct, the old man which grows corrupt according to the deceitful lusts, and be renewed in the spirit of your mind, and that you put on the new man which was created according to God, in true righteousness and holiness.” Ephesians 4:17-24



Dendrite



1. Numerous _____ work together in groups to perform _____ tasks like these!

neurons spiritual

2. “But also for this very reason, giving all _____, add to your faith virtue, to virtue knowledge, to knowledge _____, to self-control perseverance, to perseverance godliness, to godliness brotherly kindness, and to brotherly kindness love. For if these things are yours and abound, you will be neither barren nor unfruitful in the knowledge of our Lord Jesus Christ.” 2 Peter 1:5-8

diligence self-control

3. “This I say, therefore, and testify in the Lord, that you should no longer walk as the rest of the Gentiles walk, in the futility of their _____, having their understanding darkened . . . who, being past feeling, have given themselves over to lewdness, to work all uncleanness with greediness. But you have not so _____ Christ . . . put off, concerning your former conduct, the old man which _____ corrupt according to the deceitful lusts, and be _____ in the spirit of your _____, and that you put on the new man which was created according to God, in true righteousness and holiness.” Ephesians 4:17-24

mind learned grows renewed mind

The Power of Your Thoughts



The brain is continually plastic, which means every time you learn a new fact, meet a new person and/or engage in some new task, your brain changes.

Recent science reveals that brain plasticity does not end in childhood. With 86 billion neurons and 5,000 possible connections for each neuron, the brain has the ability to rewire itself. This is neuroplasticity and learning.

Replace Worldly Thoughts with God's Thoughts!

“Therefore lay aside all filthiness and overflow of wickedness, and receive with meekness the implanted word, which is able to save your souls” (James 1:21).



“Therefore, laying aside all malice, all deceit, hypocrisy, envy, and all evil speaking, as newborn babes, desire the pure milk of the word, that you may grow thereby...” (1 Peter 2:1-3).



1. The _____ is continually _____, which means every time you _____ a new fact, meet a new person and/or engage in some new task, your brain _____.

brain plastic learn changes

2. Recent science reveals that _____ does not end in childhood. With 86 _____ neurons and 5,000 possible connections for each neuron, the brain has the ability to _____ itself. This is _____ and learning.

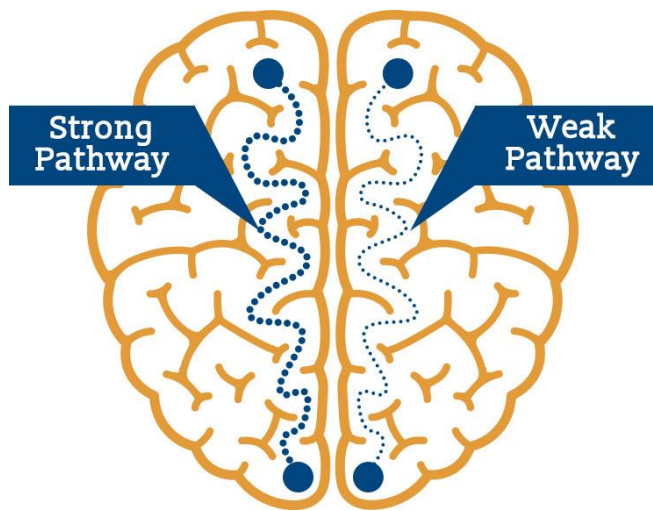
brain plasticity billion rewire neuroplasticity

3. “Therefore _____ all filthiness and overflow of wickedness, and _____ with meekness the implanted _____, which is able to save your souls” (James 1:21).

lay aside receive word

“Therefore, _____ all malice, all deceit, hypocrisy, envy, and all evil speaking, as newborn babes, _____ the pure milk of the _____, that you may _____ thereby...” (1 Peter 2:1-3).

laying aside desire word grow

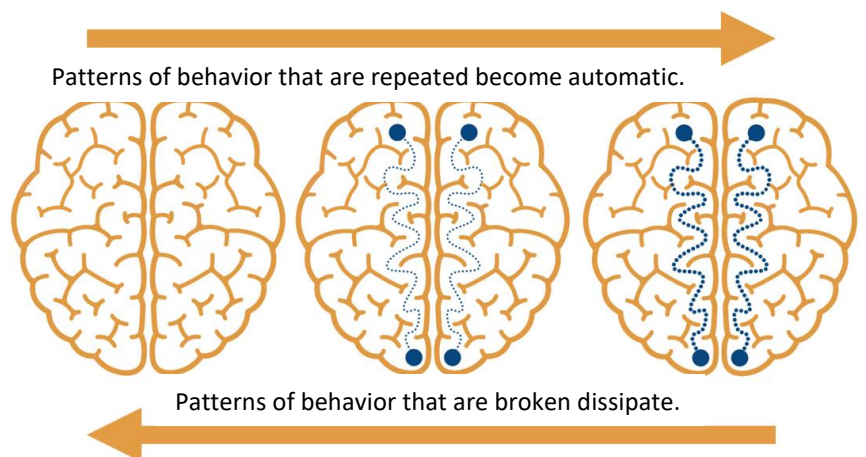


The brain can and does change throughout our lives. It is adaptable like plastic hence neuroscientists call this neuroplasticity.

How does neuroplasticity work?

If you think of your brain as a dynamic connected power grid, there are billions of pathways or roads lighting up every time you think feel or do something. Some of these roads are well-traveled. These are our habits. Our established ways of thinking, feeling, and doing. Every time we think in a certain way, practice a particular task, or feel a specific emotion, we strengthen this road. It becomes easier for our brains to travel this pathway.

Say we think about something differently, learn a new task, or choose a different emotion. We start carving out a new road. If we keep traveling that road, our brains begin to use this pathway more and this new way of thinking, feeling, or doing becomes second nature.



The old pathway gets used less and less and weakens. This process of rewiring your brain by forming new connections and weakening old ones, is neuroplasticity in action. The good news is that we all have the ability to learn and change by rewiring our brains.



1. The _____ can and does _____ throughout our lives. It is _____ like plastic hence neuroscientists call this _____.

brain change adaptable neuroplasticity

2. If you think of your brain as a dynamic connected power grid, there are billions of pathways or roads lighting up every time you _____ or _____ something. Some of these roads are well-traveled. These are our _____. Our established ways of thinking, feeling, and doing. Every time we think in a certain way, _____ a particular task, or feel a specific emotion, we strengthen this road. It becomes easier for our _____ to travel this pathway.

think feel do habits practice brain's

3. Say we think about something differently, _____ a new task, or choose a different emotion. We start carving out a new road. If we keep traveling that road, our _____ begin to use this _____ more and this new way of thinking, feeling, or doing become second nature.

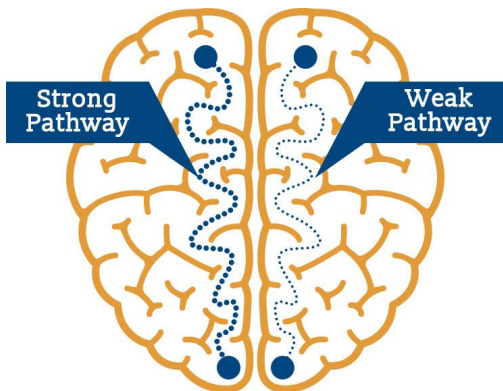
learn brains' pathway

4. The old _____ gets used less and less and weakens. This process of _____ your brain by forming new connections and weakening old ones, is _____ in action. The good news is that we all have the ability to _____ and _____ by rewiring our _____.

pathway rewiring neuroplasticity learn change brains

The brain can and does change throughout our lives. It is adaptable like plastic hence neuroscientists call this neuroplasticity.

How does neuroplasticity work?

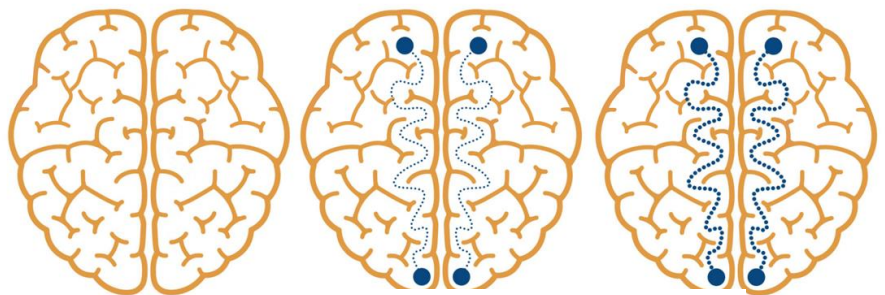


“...Exercise yourself toward godliness. For bodily exercise profits a little, but godliness is profitable for all things . . . These things command and teach:

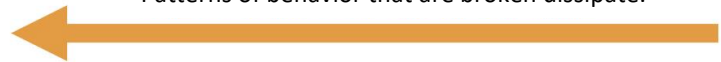
“...Be an example to the believers in word, in conduct, in love, in spirit, in faith, in purity. Till I come, give attention to reading, to exhortation, to doctrine . . . Meditate on these things...” (1 Timothy 4:7-15).

“Finally, brethren, whatever things are true, whatever things are noble, whatever things are just, whatever things are pure, whatever things are lovely, whatever things are of good report, if there is any virtue and if there is anything praiseworthy--
meditate on these things.
Philippians 4:8,9

Patterns of behavior that are repeated become automatic.



Patterns of behavior that are broken dissipate.



“The things which you learned and received and heard and saw in me, these do, and the God of peace will be with you . . . I have learned in whatever state I am, to be content...”
(Philippians 4:9-11).



1. "..._____ yourself toward _____. For bodily _____ profits a little, but godliness is profitable for all things . . . These things command and teach:

exercise godliness exercise

"...Be an example to the believers in word, in_____, in love, in _____, in faith, in purity. Till I come, give attention to reading, to exhortation, to doctrine . . . _____ on these things..." (1 Timothy 4:7-15).

conduct spirit meditate

"Finally, brethren, whatever things are true, whatever things are noble, whatever things are just, whatever things are pure, whatever things are lovely, whatever things are of good report, if there is any virtue and if there is anything praiseworthy--_____ on these things.

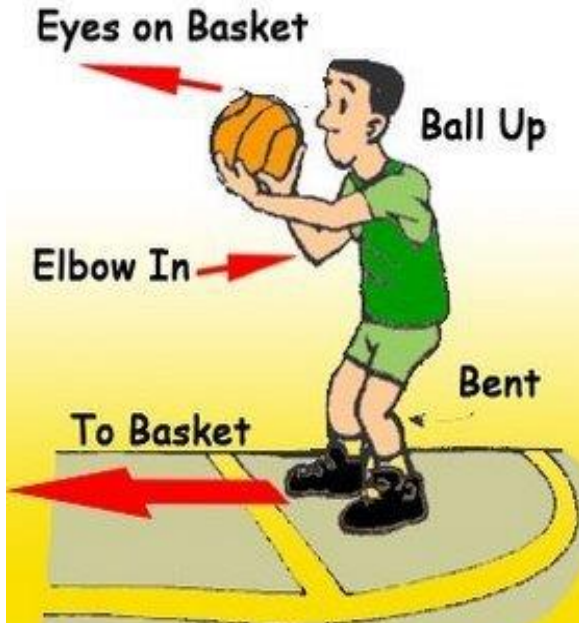
Philippians 4:8,9

meditate

"The things which you _____ and _____ and _____ and saw in me, these_____, and the God of peace will be with you . . . I have _____ in whatever state I am, to be _____..." (Philippians 4:9-11).

learned received heard do learned content

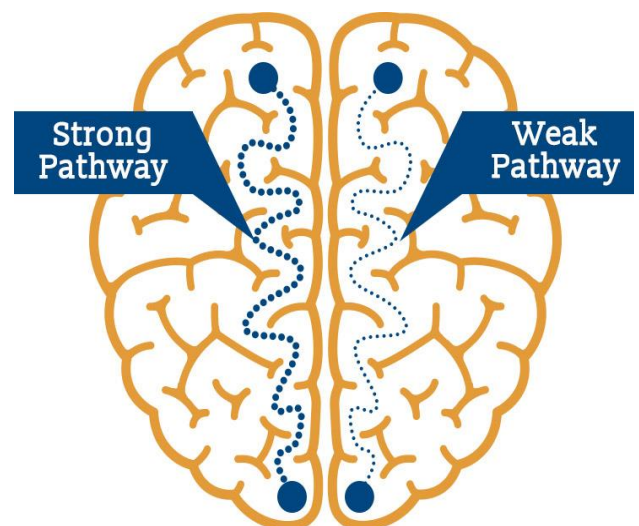
God designed the brain to become more efficient with practice. Scientists call this brain function neuroplasticity!



Say you're learning how to shoot a free-throw. If it's your first time doing it, you don't yet have a pathway for that movement in your brain. When you're first learning, your brain is like a forest full of trees and dense foliage with no clear pathway between point A and point B. Halo Sports

In order to improve your free-throw, you need to refine and strengthen the free-throw pathway in your brain. The way you do that is through practice. Practice gradually widens the trail through the trees (increases the muscle memory in your brain).

Eventually with enough practice, what started as a trail has become a full-blown highway. Now, you're a master, draining almost every free-throw and the movement is completely second nature. This is neuroplasticity. Halo Sports





1. Say you're learning how to shoot a free-throw. If it's your first time doing it, you don't yet have a _____ for that movement in your _____. When you're first _____, your brain is like a forest full of trees and dense foliage with no clear pathway between _____ A and point B. Halo Sports

pathway brain learning point

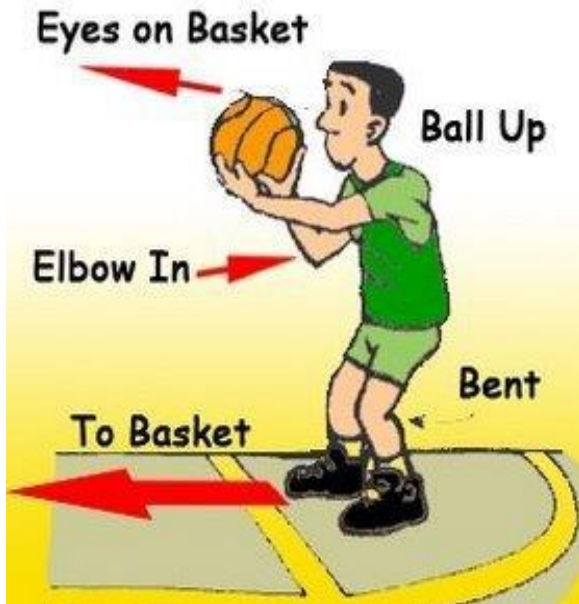
2. In order to _____ your free-throw, you need to _____ and _____ the free-throw pathway in your brain. The way you do that is through practice. Practice gradually widens the trail through the trees (increases the _____ memory in your _____).

improve refine strengthen muscle brain

3. Eventually with enough _____, what started as a trail has become a full-blown highway. Now, you're a master, draining almost every free-throw and the _____ is completely second nature. This is _____. Halo Sports

practice movement neuroplasticity

Likewise, our brain is capable of performing spiritual neuroplasticity!



“Now the works of the flesh are evident, which are: adultery, fornication, uncleanness, lewdness, idolatry, sorcery, hatred, contentions, jealousies, outbursts of wrath, selfish ambitions, dissensions, heresies, envy, murders, drunkenness, revelries, and the like . . . those who **practice** such things will not inherit the kingdom of God” (Galatians 5:19-21).

Use of the word “**practice**” implies that each of the “works of the flesh” listed above was learned and practiced. The word “practice” means “performed repeatedly or habitually” (Strong’s Dictionary).

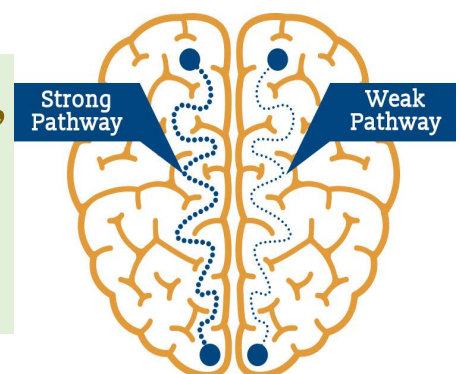
With “practice” pathways for “works of the flesh” grow wider and faster. This is harmful neuroplasticity (addiction).

The following passages imply that with practice and the Holy Spirit’s help, “works of the flesh” pathways weaken and “fruit of the Spirit” pathways strengthen.

“I say then: Walk in the Spirit, and you shall not fulfill the lust of the flesh... And those who are Christ's have crucified the flesh with its passions and desires. If we live in the Spirit, let us also walk in the Spirit” (Galatians 5:16,24,25).

“But the **fruit** of the Spirit is love, joy, peace, longsuffering, kindness, goodness, faithfulness, gentleness, self-control”

(Galatians 5:22,23).





1. “Now the _____ of the _____ are evident, which are: adultery, fornication, uncleanness, lewdness, idolatry, sorcery, hatred, contentions, jealousies, outbursts of wrath, _____ ambitions, dissensions, heresies, envy, murders, drunkenness, revelries, and the like . . . those who _____ such things will not inherit the kingdom of God” (Galatians 5:19-21).

works flesh selfish practice

2. Use of the word “_____” implies that each of the “works of the flesh” listed above was _____ and practiced. The word “practice” means “performed _____ or habitually” (Strong’s Dictionary).

practice learned repeatedly

3. With “_____” pathways for “works of the flesh” grow wider and faster. This is harmful _____ (_____).

practice neuroplasticity addiction

4. “I say then: Walk in the _____, and you shall not fulfill the lust of the flesh... And those who are Christ's have _____ the flesh with its passions and _____. If we live in the Spirit, let us also walk in the Spirit” (Galatians 5:16,24,25).

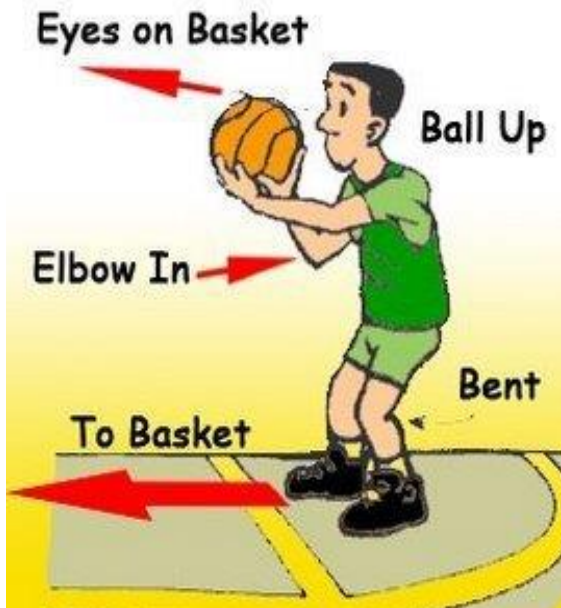
Spirit crucified desires

5. “But the _____ of the Spirit is love, joy, peace, longsuffering, kindness, goodness, faithfulness, gentleness, _____”

fruit self-control

Spiritual exercise is more important than physical exercise!

“...Exercise yourself toward godliness. For bodily exercise profits a little, but godliness is profitable for all things . . . Meditate on these things; give yourself entirely to them, that your progress may be evident to all” (1 Timothy 4:7,8,15).

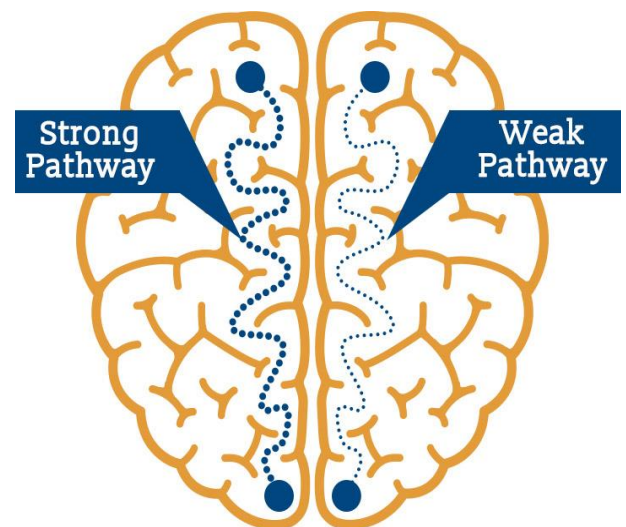


The words “exercise” and “godliness” imply activities to strengthen your spiritual pathways. Use of the word “meditate” implies prayer, Bible study and thinking spiritual thoughts to strengthen your spiritual pathways.

These are additional spiritual fruit (spiritual pathways) that are grown through our “diligence” (practice) and the Holy Spirit’s help:

“...His divine power has given to us all things that pertain to life and godliness . . . For this very reason, giving all diligence, add to your faith virtue, to virtue knowledge, to knowledge self-control, to self-control perseverance, to perseverance godliness, to godliness brotherly kindness, and to brotherly kindness love”

(2 Peter 1:3,5).





1. "..._____ yourself toward _____. For bodily exercise profits a little, but godliness is profitable for all things . . . _____ on these things; give yourself entirely to them, that your progress may be evident to all" (1 Timothy 4:7,8,15).

exercise godliness meditate

2. The words "_____" and "_____" imply activities to _____ your spiritual pathways. Use of the word "meditate" implies prayer, Bible study and thinking _____ thoughts to strengthen your spiritual pathways.

exercise godliness strengthen spiritual

"...His divine _____ has given to us all things that pertain to life and godliness . . . For this very reason, giving all _____, add to your faith virtue, to virtue knowledge, to knowledge _____, to self-control perseverance, to perseverance godliness, to godliness brotherly kindness, and to brotherly kindness love" (2 Peter 1:3,5).

power diligence self-control