

Whole-Brain Relationships

Companion workbook



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Integrative Change Framework Review

Question 4 of 4

Which stage is **this class** a part of? The stage where you gain **knowledge** about you, your brain and your body and then develop a few **essential skills that you'll need in later stages**?

- ☐ A Stage 1 - Learn & Understand
- ☐ B Stage 2 - Discover & Prepare
- ☐ C Stage 3 - Implement & Infuse
- ☐ D Stage 4 - Amplify & Infuse

Answers: 1-C, 2-B, 3-C, 4-A

Stress Response System Review

Question 1 of 3

Our stress response, or emotional response system is designed to operate

- ☐ A all the time
- ☐ B intermittently
- ☐ C twice a day
- ☐ D only when we're scared

Question 2 of 3

We're designed to experience all of our emotions. What determines the health of our emotional response is

- ☐ A how frequently it activates
- ☐ B how intensely it activates
- ☐ C in what scenario or environment it activates
- ☐ D what default state it rebounds back to
- ☐ E all of the above

Question 3 of 3

To the brain, the fundamental definition of stress is

- ☐ A anything hard
- ☐ B anything I don't enjoy doing
- ☐ C anything that is new, different or conflicting

Answers: 1-B, 2-E, 3-C

Feeling and Emotions Review

Question 1 of 3

Where do we experience emotional response?

- ☐ A in our mind
- ☐ B in our body
- ☐ C emotions don't exist

Question 2 of 3

The primary role of emotion is

- ☐ A to cause pain
- ☐ B to interfere with our logical thinking
- ☐ C to get us to move or behave in some way

Question 3 of 3

Feelings are like a _____ that describes the emotional response combined with the environment or scenario where it activates

- ☐ A a made-up story
- ☐ B neon sign
- ☐ C a label

Answers: 1-B, 2-C, 3-C

Brain-Body Communications Review

Question 1 of 3

When the brain believes we are in danger, it triggers the secretion of

- ☐ A acetylcholine (calming agent)
- ☐ B dopamine (reward agent)
- ☐ C norepinephrine (adrenaline)

Question 2 of 3

Once an experience is viewed as no longer threatening, _____ is released to counter the stress response

- ☐ A dopamine (reward agent)
- ☐ B acetylcholine (calming agent)
- ☐ C norepinephrine (adrenaline)

Question 3 of 3

In this class, we're referring to our **sympathetic** 'fight or flight' system as _____ and the **parasympathetic** 'rest and relax' system as _____.

- ☐ A the 'Brake' ; the 'Accelerator'
- ☐ B the 'Accelerator' / the 'Brake'

Answers: 1-C, 2-B, 3-B

Emotional Regulation Review

Question 1 of 5

Self-Regulation means

- ☐ A being unemotional
- ☐ B suppressing your emotion
- ☐ C being like a 'vulcan', always in your intellect and very cerebral
- ☐ D avoiding your emotions
- ☐ E none of the above

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Question 2 of 5

How do we learn to regulate our emotional nervous system as children?

- ☐ A trial and error
- ☐ B we don't. That's something we're supposed to learn as adults
- ☐ C through modeling and soothing by our adult caregivers

Question 3 of 5

Our emotional working range adopts a certain arousal level as it's default 'home base'...

- ☐ A if we spend a lot of time in high-activation
- ☐ B when we spend a lot of time in low-activation
- ☐ C we spend a lot of time in moderate activation
- ☐ D all of the above

Question 4 of 5

The ability for your brain and emotional nervous system to know **how often** to turn on, **how much** to turn on and which situations **are appropriate** to turn on is called...

- ☐ A conceptualization
- ☐ B isolation
- ☐ C differentiation
- ☐ D modulation

Question 5 of 5

Our attachment style combined with our ability to manage our emotions determines...

- ☐ A our stress tolerance range
- ☐ B our academic range
- ☐ C our vocal range

Answers: 1-E, 2-C, 3-D, 4-C, 5-A

What Emotional Regulation Looks like - Review

Question 1 of 3

What do you generally see in people who are emotionally regulated?

- ☐ A emotional stability
- ☐ B emotional resilience and flexibility
- ☐ C both A and B

Question 2 of 3

The ability to **specifically describe** an emotional experience, instead of just giving it a generic label is referred to as

- ☐ A emotional specificity
- ☐ B emotional granularity
- ☐ C emotional diversity

Question 3 of 3

Self-regulation is about the ability to **rebound back to** and **flexibly operate within** a varied range of _____ emotion.

- ☐ A moderate
- ☐ B minimal
- ☐ C maximum

Answers: 1-C, 2-B, 3-A

Right and Left Hemispheres Review

Question 1 of 7

In which brain hemisphere does most of our **problem-solving, logical thinking** and **judgment** take place?

☐ A left

☐ B right

Question 2 of 7

Which hemisphere develops first in children?

☐ A left

☐ B right

Question 3 of 7

In which hemisphere do we do most of our **past** and **future** thinking?

☐ A left

☐ B right

Question 4 of 7

In which hemisphere do we process **facial recognition**, the **emotional 'landscape'** of others and **language nuance**?

☐ A left

☐ B right

Question 5 of 7

In which hemisphere do we process the most **creativity, artistry, imagination** and **what's happening NOW**?

☐ A left

☐ B right

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Question 6 of 7

Children under the age of 7-8 are strong in

- ☐ A creativity
- ☐ B discernment ability
- ☐ C imagination
- ☐ D judgment ability
- ☐ E A and B
- ☐ F A and C

Question 7 of 7

How many brains do we have?

- ☐ A 3 - the Thinking brain, the Primitive brain and the Emotional brain
- ☐ B 1 - although there are different clusters or 'hubs' of neurons, the brain is more like one large network

Answers: 1-A, 2-B, 3-A, 4-B, 5-B, 6-F, 7-B

**Great job at
finishing Module I !**



Levels of Consciousness - Review

Question 1 of 3

The level of consciousness where **active learning** and **present awareness** takes place is...

- ☐ A the unconscious level
- ☐ B the subconscious level
- ☐ C the conscious level

Question 2 of 3

The level of consciousness where we **learn passively** and can **easily retrieve** memory is ...

- ☐ A the conscious level
- ☐ B the subconscious level
- ☐ C the unconscious level

Question 3 of 3

The level of consciousness that stores **long-term memory** and **automated body function** and is **referenced** for behavior choices is...

- ☐ A the unconscious level
- ☐ B the subconscious level
- ☐ C the conscious level

Answers: 1-C, 2-B, 3-A

Brain Efficiency - Review

Question 1 of 3

Activities that are **routine** and **familiar** are very energy- _____ to the brain.

- ☐ A expensive
- ☐ B depleting
- ☐ C efficient

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Question 2 of 3

Anything that is **new, different** or **unexpected** is **conflicting** to the brain and very energy-

☐ A expensive

☐ B efficient

☐ C exploitive

Question 3 of 3

The best way to deal with the brain's **natural, initial resistance** is...

☐ A slow down

☐ B speed up

☐ C blow it off

☐ D commitment and repetition

☐ E A and D

Answers: 1-C, 2-A, 3-E

Brain Wave Frequency - Review

Question 1 of 4

the **slowest** brainwave speed and why babies sleep a lot is...

☐ A beta

☐ B delta

☐ C theta

Question 2 of 4

The brain speed where can think **and** feel, analyze **and** still create is..

☐ A zeta

☐ B delta

☐ C alpha

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Question 3 of 4

The brain speed where we have the highest **concentration** and **performance**, but also can also be seen with **high anxiety** is. .

- ☐ A alpha
- ☐ B high-end beta
- ☐ C theta

Question 4 of 4

the brain speed of most children **under the age of 7 or 8** which is conducive to **dreaming** and **imagination** is..

- ☐ A high-end beta
- ☐ B delta
- ☐ C theta

Answers: 1-B 2-C, 3-B, 4-C

Feedback Loops - Review

Question 1 of 2

The ability for our **young** brains to **accept** and **store** patterns **before** it has fully developed judgment and discernment ability is called...

- ☐ A premature choice making
- ☐ B premature cognitive commitment
- ☐ C premature cognitive rejection

Question 2 of 2

This premature storage of a pattern can be **intensified** by..

- ☐ A trauma
- ☐ B neglect
- ☐ C dopamine
- ☐ D all of the above

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Question 3 of 3

Although it takes some work, these patterns can be **identified** and our unwanted behaviors **interrupted** with...

- ☐ A awareness
- ☐ B intention
- ☐ C repetition
- ☐ D all of the above

Answers: 1-B, 2-D 3-D

Pleasure and Pain - Review

Question 1 of 3

Anything **new, different** or **unexpected** can cause the brain **conflict**. Another term for this state of the brain is...

- ☐ A cognitive derangement
- ☐ B cognitive harmony
- ☐ C cognitive dissonance

Question 2 of 3

We experience 'pleasure' when something **matches** our **expectations** or a **belief** about the experience. This is called...

- ☐ A cognitive harmony
- ☐ B cognitive bliss
- ☐ C cognitive dissonance

Question 3 of 3

Pleasurable experiences feel great! But they can also become **problematic** due to...

- ☐ A overuse can lead to addiction
- ☐ B experiencing pleasure all the time is never a problem
- ☐ C we can suffer when continual sources of pleasure can't be maintained
- ☐ D A and C

Answers: 1-C, 2-A 3-D

Negativity Bias and Neuroplasticity - Review

Question 1 of 3

Our brain **naturally** has a negative bias because..

- ☐ A humans are just mean at their core
- ☐ B negativity helps us relate better to other people
- ☐ C it's an effective way to keep us safe by keeping us away from dangerous experiences that could end our life

Question 2 of 3

We can completely **get rid** of our negative bias if we try hard enough. Yes or no?

- ☐ A yes - we can do anything if we try hard enough
- ☐ B no - it's a safety feature of our brain. However, with time and practice, we can train our brain to more frequently notice the positive aspects of our life.

Question 3 of 3

Current research shows that **brain change is possible** until age...

- ☐ A 25
- ☐ B 40
- ☐ C brain change is possible throughout our entire life

Answers: 1-C, 2-B, 3-C

The 'Workroom' - Review

the cerebral cortex

Question 1 of 2

The **2 hemispheres** of the cerebral cortex are **connected** by a thick wall of neurons called....

- ☐ A cerebral ganglia
- ☐ B the hemispheric bridge
- ☐ C the corpus callosum

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Question 2 of 2

We can **positively influence** the 'Workroom' of our brain, or our cerebral cortex, by...

- ☐ A being aware of, and choosing, what we expose it to
- ☐ B meditation or mindfulness practice - it optimizes the use of our whole brain by increasing the number of neurons that connect the 2 hemispheres
- ☐ C watching violent movies and listening to fake news
- ☐ D A and B

Answers: 1-C, 2-D

The 'Conflict Manager' - Review the anterior cingulate cortex (ACC)

Question 1 of 3

The Anterior Cingulate Cortex ("The Conflict Manager") is **connected** to...

- ☐ A the intellectual 'hubs' of the brain network
- ☐ B the emotional 'hubs' of the brain network
- ☐ C both the intellectual AND the emotional 'hubs'

Question 2 of 3

The ACC is what helps us **resolve mental conflict** or dissonance. It needs exposure to _____ in order **to get stronger**?

- ☐ A heat
- ☐ B pleasure
- ☐ C a mix of routine and different experiences so it has something to decide about
- ☐ D a mix of logic and emotion so it can practice using the right amount of both in decision-making
- ☐ E C and D

Question 3 of 3

The "Conflict Manager" has a sort of **threshold for activation** that determines when emotional response will be intensified, or not. Which factor(s) help **raise** this activation threshold?

- ☐ A time
- ☐ B non-reactivity
- ☐ C intense concentration
- ☐ D A and B

Answers: 1-C, 2-E, 3-D

The 'Filter' - Review the reticular activating system (RAS)

Question 1 of 3

The Reticular Activating system (the "Filter") is connected to most of our senses and **screens in information** so that....

- ☐ A we don't get overwhelmed
- ☐ B we can focus on what's important to us
- ☐ C we don't forget anything
- ☐ D A and B

Question 2 of 3

Visualization is a powerful use of the RAS / 'Filter' because...

- ☐ A If we just think about something it will show up on our doorstep without us needing to take any action
- ☐ B the brain responds the same way to what's real as it does to what's imagined.
- ☐ C the brain responds differently to what's real and what's imagined.

Question 3 of 3

How does the 'Filter' in our brain help us **accomplish goals**?

- ☐ A by preventing procrastination
- ☐ B by directing our attention towards input that helps us to accomplish those goals
- ☐ C by supplying us with hits of dopamine

Answers: 1-D, 2-B, 3-B

The 'Coordinator/Label-Maker' - Review the amygdala

Question 1 of 4

The '**coordinator**' role of the amygdala considers which of the following during any experience?

- ☐ A have you seen this situation before?
- ☐ B what did you do last time this happened?
- ☐ C how life-threatening is this?
- ☐ D all of the above

Question 2 of 4

The '**label-making**' feature of the amygdala consider which of the following in any experience?

- ☐ A how should this be interpreted?
- ☐ B what should we call it?
- ☐ C what nationality is this person?
- ☐ D how deeply should we register this experience in memory?
- ☐ E A, B and D

Question 3 of 4

The amygdala gives an **emotional 'value'** to every experience. If that value is high, the memory becomes '**sticky**' and is **deeply registered**. What is this called?

- ☐ A resilience
- ☐ B salience
- ☐ C resistance

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Question 4 of 4

How can we **influence** the amygdala?

- ☐ A by giving an experience a different meaning
- ☐ B by slowing down and allowing more time for choices to be made
- ☐ C by forcing yourself to get negative thoughts out of your head
- ☐ D A and B

Answers: 1-D, 2-E, 3-B, 4-D

The 'Packing and Shipping Center' - Review the hippocampus

Question 1 of 4

The **role(s)** of the hippocampus include...

- ☐ A aiding to put an emotional experience into perspective by keeping the amygdala calmer while its trying to translate an experience
- ☐ B organizing an experience before its put into memory
- ☐ C 'time-stamping' a memory so we can tell its from our past.
- ☐ D all of the above

Question 2 of 4

the type of memory we sense **in our bodies** is called...

- ☐ A implicit memory
- ☐ B explicit memory
- ☐ C consolidated memory

Question 3 of 4

the type of memory that contributes to the **'timeline'** of our life and helps us **differentiate** that its from **our past** is called...

- ☐ A implicit memory
- ☐ B explicit memory
- ☐ C consolidated memory

Question 4 of 4

Memory can become **fragmented** if the hippocampus is **blocked** from doing its job. What are some well-know hippocampus **blockers** that can sometimes result in a 'blackout' of memory?

- ☐ A stress
- ☐ B rage
- ☐ C deeply felt joy
- ☐ D excessive use of alcohol
- ☐ E sleeping pills
- ☐ F A,B,D and E

Answers: 1-D, 2-A, 3-B, 4-F

The 'Expressway to Calm' - Review the vagus nerve

Question 1 of 3

What are some of the **functions** of the vagus nerve?

- ☐ A activates the release of adrenaline (action agent)
- ☐ B activates the release of acetylcholine (calming agent)
- ☐ C increases heart rate and breathing
- ☐ D decreases heart rate and breathing
- ☐ E A and C
- ☐ F B and D

Question 2 of 3

The ability to **sense our organs** (gut feeling) and what's neuro-chemically **happening in our bodies** is called _____.

- ☐ A proprioception
- ☐ B organoception
- ☐ C Interoception

Question 3 of 3

How can we **strengthen** the vagus nerve, or increase vagal tone?

- ☐ A deep diaphragmatic breathing
- ☐ B social or community involvement
- ☐ C jumping up and down
- ☐ D practicing body sensation awareness
- ☐ E A, B and D

Answers: 1-F, 2-C, 3-E

Great job!

For the next module, we're going to switch it up.

After each video, take a few moments to write out your answers to 3 questions



Integrative Change Framework Review

Question 1 of 4

Which is the correct order of the stages for Integrative Change?

- ☐ A Learn /Understand > Implement/ establish > Discover/Prepare > Amplify / Infuse
- ☐ B Discover/Prepare > Learn/Understand > Amplify/Infuse > Implement/ Establish
- ☐ C Learn/Understand > Discover/Prepare > Implement / Establish > Amplify/Infuse
- ☐ D Implement/Establish > Discover/ Prepare > Learn/Understand > Amplify/ Infuse

Question 2 of 4

Which stage is where you get **specific** details about what's at the root of your behavior, **clarify** where you want to go from here, and set the stage to **optimize** your change efforts?

- ☐ A Stage 1 - Learn & Understand
- ☐ B Stage 2 - Discover & Prepare
- ☐ C Stage 3 - Implement & Establish
- ☐ D Stage 4 - Amplify & Infuse

Question 3 of 4

Which stage is where you put your selected and customized **brain-strengthening** and **nervous system retraining practices** to consistent, daily use?

- ☐ A Stage 1 - Learn & Understand
- ☐ B Stage 2 - Discover & Prepare
- ☐ C Stage 3 - Implement & Establish
- ☐ D Stage 4 - Amplify & Infuse

Healthy Stress Response - questions

1. Describe a situation where you noticed yourself having a strong emotional response. Who or what was involved?
2. Do you recall how it felt in your body? (hands clenched, pit in stomach, felt hot etc)
3. What did you do or think at that moment, in behavior and thought? Think of any small detail, even if you initially answer 'nothing'

Infant Stress Response / Limiting Belief Creation - questions

1. How did your parents or caregivers respond when you were upset, or scared? How about when you were excited or happy?

2. Even great parents can't be present to witness EVERY child experience. Was there ever a time at school, on a playground or with friends that you experienced something scary, sad or confusing and an adult wasn't around to witness it and respond?

Limiting Belief cycle / Adaptive Behaviors I - questions

1. As you were growing up, what patterns of behavior stand out to you?
2. Is there a 'type' of person you are drawn too? Do you see a pattern? What sort of relationship qualities do feel the most relaxed and comfortable around?
3. Describe how you feel inside your body and mind most of the time - use any words you want to describe it (tight, pressured, sleepy, anxious, buzzy etc)

Adaptive Behaviors II - questions

1. Are there any behaviors that are becoming problematic or no longer helping you, that may be getting reinforced by a dopamine reward? Remember, reward can come in the form of 'relief' or 'stimulus' too.

2. What strategies do you notice yourself using to relax? get pumped up? to get your courage up? or to shut your thinking brain 'off'?

Adaptive Behaviors II - questions

3. Describe how some of these strategies may be taking their toll on your health, your relationships or your work goals.

Bonus question:

4. Is your life diverse enough? Can you think of a few additional healthy strategies that you could add to your list in question #2?

Fantastic job at completing this course!

