

Neuroplasticity Exercises for Emotional Regulation – Summary

Lesson 1: Introduction to Emotional Regulation and Neuroplasticity

Lisa Wimberger, the founder of Neurosculpting®, introduces the course by sharing her personal journey with emotional dysregulation and trauma. She recounts how, at 15, she was struck by lightning, which led to an anoxic seizure disorder. Over time, these seizures worsened, and by her early 30s, she experienced episodes of flatlining, requiring resuscitation. During this period, her emotional state was highly unstable—she was reactive, volatile, and unable to regulate her emotions effectively.

Her breakthrough came with the discovery of **neuroplasticity**, which allowed her to rewire her brain and ultimately eliminate her seizures. Neuroplasticity empowered her to take control of her emotions rather than being controlled by them. She emphasizes that understanding the nervous system and applying specific techniques can help anyone achieve emotional balance.

This course will focus on:

- The link between emotions and nervous system states
- How to transition between different emotional states
- The purpose of various nervous system responses
- How to develop a healthy relationship with these states

By the end of the course, participants will have practical tools to build emotional resilience and intelligence, feeling more in control of their emotional experiences.

Lesson 2: Understanding Emotional Dysregulation and Nervous System States

Lisa begins by addressing the common feelings of guilt and shame associated with emotional outbursts or repression. She stresses that emotions are natural for all mammals, and beating oneself up over them is counterproductive. Many people believe that simply "knowing better" should lead to emotional regulation, but in reality, **consistent daily practices** are what make a difference. These practices train the nervous system to pause before reacting.

What Is Dysregulation?

Lisa defines **homeostasis** as a state of physical and emotional balance where the body is at rest but prepared for action if needed. **Dysregulation** occurs when internal or external factors push the nervous system out of homeostasis. While moving out of homeostasis is necessary for survival and productivity, the problem arises when stress is not well-managed.

How Dysregulation Manifests in the Body

There are two primary ways the body experiences dysregulation:

1. **Sympathetic Arousal ("Fight or Flight")** – The body enters a heightened state of alertness, preparing to confront or escape a perceived threat.
 - Increased heart rate
 - Release of sugar into the bloodstream
 - Suppressed digestion
 - Muscle tension
 - Hyper-focused thoughts (rumination)
 - Heightened senses (hearing and smell)
2. **Parasympathetic Freeze ("Shutdown")** – The body becomes immobilized, often in response to overwhelming stress.
 - Decreased heart rate
 - Brain fog and difficulty processing information
 - Suppressed digestion and weakened immune function
 - Holding breath and physical tension (without readiness for action)
 - Emotional numbness or paralysis

How Dysregulation Affects the Brain

- **Sympathetic Arousal ("Fight or Flight")** activates the **mid-brain** (amygdala, hippocampus, hypothalamus). This can lead to emotional reactivity, agitation, and impulsiveness.
- **Parasympathetic Freeze ("Shutdown")** is governed by the **brainstem**, which controls automatic survival functions (breathing, heart rate, etc.). In this state, oxygen to the brain decreases, leading to disorientation and detachment.
- **Emotional Regulation** occurs when the **prefrontal cortex** is engaged, allowing for rational thinking, empathy, and self-awareness. However, when

the mid-brain or brainstem is in control, the prefrontal cortex becomes less active, making it harder to self-regulate.

Key Takeaway

The goal of emotional regulation is **not** to suppress emotions but to **shift activity from the mid-brain to the prefrontal cortex** when necessary. This process allows individuals to respond thoughtfully rather than react impulsively.

Before moving on to practical exercises, Lisa encourages participants to identify whether they tend to experience **sympathetic arousal (fight-or-flight)** or **parasympathetic freeze (shutdown)** when dysregulated. Understanding one's default response is the first step toward effective emotional regulation.

HOMEWORK:

- Find out which response you're in more often: fight or flight (sympathetic arousal), freeze (parasympathetic freeze)?

—> This week, 3 times a day: Check in with your stress response

Ask these questions:

1. Arousal
 - Is my heart rate elevated?
 - Is my breath shallow?
 - Are my muscles tense (like I need to „just move“)?
1. Freeze
 - Am I holding my breath?
 - Am I staring off into space?
 - Do I find it hard to concentrate?
 - Am I tense and feel like I'm frozen solid?

—> What stress response do you use when?

Weekday	time of day	Sympathetic Arousal (x) and notes		Parasympathetic Freeze	
		<ul style="list-style-type: none"> - elevated heart rate? - shallow breath? - tense muscles (want to move)? 		<ul style="list-style-type: none"> - holding breath? - staring into space? - hard to concentrate? - tense/ frozen solid? 	
MONDAY	Morning	<input type="checkbox"/>		<input type="checkbox"/>	
	Midday	<input type="checkbox"/>		<input type="checkbox"/>	
	Evening	<input type="checkbox"/>		<input type="checkbox"/>	
TUESDAY	Morning	<input type="checkbox"/>		<input type="checkbox"/>	
	Midday	<input type="checkbox"/>		<input type="checkbox"/>	
	Evening	<input type="checkbox"/>		<input type="checkbox"/>	
WEDNESDAY	Morning	<input type="checkbox"/>		<input type="checkbox"/>	
	Midday	<input type="checkbox"/>		<input type="checkbox"/>	
	Evening	<input type="checkbox"/>		<input type="checkbox"/>	
THURSDAY	Morning	<input type="checkbox"/>		<input checked="" type="checkbox"/>	staring into space, difficult to concentrate
	Midday	<input type="checkbox"/>		<input type="checkbox"/>	
	Evening	<input type="checkbox"/>		<input type="checkbox"/>	
FRIDAY	Morning	<input type="checkbox"/>		<input type="checkbox"/>	
	Midday	<input type="checkbox"/>		<input type="checkbox"/>	
	Evening	<input type="checkbox"/>		<input type="checkbox"/>	
SATURDAY	Morning	<input type="checkbox"/>		<input type="checkbox"/>	
	Midday	<input type="checkbox"/>		<input type="checkbox"/>	
	Evening	<input type="checkbox"/>		<input type="checkbox"/>	
SUNDAY	Morning	<input type="checkbox"/>		<input type="checkbox"/>	
	Midday	<input type="checkbox"/>		<input type="checkbox"/>	
	Evening	<input type="checkbox"/>		<input type="checkbox"/>	

Lesson 2: How to Regain Control When Emotions Take Over

Understanding Emotional Hijacks

When emotions spiral out of control, it can feel like you are powerless. However, through **bottom-up practices**, you can quickly interrupt emotional hijacks. Bottom-up techniques focus on **the body and senses**, rather than purely cognitive strategies. These practices target the nervous system directly, offering rapid relief from stress.

Stress causes **muscle contractions**—whether through tension or shutdown responses. The muscles stay contracted until they receive a signal to relax. This can happen in two ways:

1. **Mental recognition** that stress has subsided, leading to muscle relaxation.
2. **Physical exhaustion of the contraction**, forcing the muscles to release.

Bottom-up approaches **manually trigger this release**, helping the body and mind return to a regulated state.

Neurogenic Tremors: Shaking Off Stress

One of the most effective ways to regulate emotions is through **neurogenic tremors**—a natural shaking response. Animals instinctively use this to release tension after stressful events. Humans, however, often suppress it.

Example:

After a minor car accident, you may start trembling. This is your body's way of self-regulating. Instead of resisting it, allowing the tremors can quickly reduce stress.

How to Practice Shaking:

- Shake your body for **10 to 30 seconds**.
- Do this **three times a day** (morning, afternoon, evening).
- You may feel **warmth, muscle relaxation, and emotional relief** almost immediately.

Shaking helps **interrupt emotional hijacks**, preventing them from escalating. It's a **free, fast, and effective** tool for emotional regulation.

The Role of Breath in Emotional Regulation

Breathing is a powerful tool to influence stress levels. The key is understanding the relationship between breath and the nervous system:

- **Inhaling accelerates the heart rate** (stimulating energy).

- **Exhaling slows the heart rate** (promoting calmness).

How to Use Breathwork Strategically:

- **If you feel frozen or shut down:** Take **sharp inhales** (through the nose) to boost adrenaline and energy.
- **If you feel anxious or agitated:** Focus on **long exhales** to slow the heart rate and relax.

By recognizing where you are on the **stress spectrum**, you can choose the correct breathing technique to restore balance.

Homework: Practicing Bottom-Up Techniques

1. **Neurogenic Tremors (Shaking)** – Practice for 15-30 seconds, three times a day, and **journal** your observations.
 - How does your body feel afterward?
 - How do your thoughts change?
 2. **Breathing Techniques** – Use either **accelerator breath (inhale focus)** or **brake breath (exhale focus)** daily, and **journal**:
 - What shifted physically?
 - How did your mental state change?
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Lesson 3: Using the Mind to Calm Emotional Hijacks

Understanding the Mid-Brain's Role

The **mid-brain** controls emotional responses like **fight, flight, and freeze**. While it can cause **reactivity**, it is not the enemy—it is designed to **protect you**.

To reduce emotional hijacks, the mid-brain needs:

- ✓ **Predictability** – Knowing what to expect.
- ✓ **Consistency** – Familiarity in your environment.
- ✓ **Situational Comfort** – Feeling physically safe.
- ✓ **Basic Needs Met** – No unmet survival needs (hunger, thirst, warmth).

If any of these are missing, the mid-brain **heightens stress**. Instead of trying to "calm down," focus on **checking these four areas** to naturally quiet emotional reactivity.

Example:

If you feel anxious in an unfamiliar place, **remind yourself**:

- "The door is locked, so I am safe."
- "I know where the restroom is, so my needs are met."
- "The temperature is comfortable, so I don't need to worry about that."

By **mentally affirming stability**, the mid-brain relaxes, and emotional intensity decreases.

How Thoughts Create Emotional Patterns

The brain **links emotions to thoughts** based on experiences. This can lead to **automatic emotional responses**, even when they are no longer relevant.

Example:

- If you smelled eucalyptus while watching a terrifying scene in a movie, your brain might associate **eucalyptus with fear**.
- If you tripped on your first day at a new school, your brain might associate **new situations with embarrassment**.

This is called **Hebb's Law of Neuroplasticity**:
"Neurons that fire together, wire together."

To break these connections, you must first become aware of them and then **reinterpret them**.

Combining Top-Down and Bottom-Up Regulation

If you experience an **emotional flare-up**, follow this sequence:

1. **Assess your stress state** – Are you anxious, frozen, or agitated?
2. **Use breathwork** – Apply the correct breathing technique.
3. **Acknowledge your emotions** – Say, "I am aware that I am feeling ___."
4. **Check your mid-brain checklist** – Ensure predictability, consistency, comfort, and basic needs.
5. **Reframe the experience** – Recognize **thoughts and emotions are linked** but not absolute truths.

This combination of **bottom-up (body-based)** and **top-down (cognitive)** techniques helps regain control and build long-term emotional resilience.

Final Takeaway

Emotional regulation is a **trainable skill**. By using a mix of **shaking, breathwork, and cognitive awareness**, you can shift out of emotional hijacks quickly and effectively.

Daily Practice Suggestions:

- ✓ Shake for 15-30 seconds, three times a day.
- ✓ Use the correct breathing technique based on your stress response.
- ✓ Apply the **mid-brain checklist** to calm reactivity.
- ✓ Recognize and **reframe** automatic thought-emotion connections.

With consistent practice, these techniques will **strengthen emotional resilience** and **reduce the impact of stress in real time**.

Lesson 4: The Social Brain and Emotional Regulation

Even though we have learned about bottom-up and top-down emotional regulation, humans do not exist in isolation. Our brain is wired for **co-regulation**, meaning that our emotions and states of mind are influenced by those around us. This can be both beneficial and challenging.

Co-regulation allows us to emotionally resonate with others, as seen when we subconsciously mirror the emotions of those around us. If we are in a room where people are anxious, we may start feeling anxious as well. Conversely, being surrounded by joy and positivity can help regulate our own emotions positively.

Since our **social brain** plays a significant role in emotional regulation, understanding its needs is crucial. The **prefrontal cortex**, often referred to as the social brain, is responsible for interpreting other people's emotions and behaviors. It assigns meaning to facial expressions, tone of voice, posture, pheromones, and words to determine how we should respond—whether we need to protect ourselves or open up for connection.

Because the **social brain** is constantly processing complex information, it requires substantial resources, including:

- **Basic physical needs** (sleep, nutrition, oxygen, exercise)
- **Psychological needs**, such as:
 - A sense of certainty or safety
 - Relatability and inclusion
 - Free will and autonomy
 - A feeling of mattering in relation to others
 - An understanding of fairness

These needs differ from those of the **midbrain**, which focuses on survival (food, shelter, and temperature regulation). The social brain, however, craves emotional connection and stability.

The Role of Relationships in Emotional Regulation

Relationships play a vital role in our ability to regulate emotions. Humans naturally scan their environment to assess safety, often using their five senses to detect social cues. For

example, if a loved one in the wilderness suddenly starts sniffing the air with concern, we instinctively become alert—even before knowing the danger.

Dysregulation can spread within a group due to **subconscious social signaling**—changes in pupil size, energy, body language, and even pheromones. If one person becomes anxious, their physiological response can trigger stress in others. However, the same principle applies in reverse: a **calm, regulated person** can help stabilize those around them simply through their breathing and presence.

This highlights the power of self-regulation in relationships. Instead of waiting for others to be calm, we can take charge of our own emotional state, which can positively influence the people around us.

Understanding Unmet Needs in Relationships

To improve relationships, it is essential to assess which of our **social brain's needs** are not being met. We should ask ourselves:

1. **Do I matter in this relationship?**
2. **Do I feel a sense of certainty or security?**
3. **Do I have free will and autonomy?**
4. **Do I feel relatable and included?**
5. **Is there a sense of fairness?**

By identifying which of these needs are unmet, we can recognize where emotional dysregulation stems from. Additionally, it is helpful to consider how the other person in the relationship might feel neglected or unheard. Since relationships are a two-way street, understanding each other's needs fosters connection and emotional balance.

Taking Responsibility for Emotional Regulation

Rather than waiting for others to change, we must **take responsibility** for regulating our own emotions. If we feel a lack of fairness, for example, we can focus on other areas where we do experience stability, such as having autonomy in other aspects of our life. By cultivating these feelings internally, we can maintain emotional agency, regardless of external triggers.

This practice requires **awareness and conscious effort**, but it is key to transforming relationships. Instead of expecting others to meet our emotional needs, we can learn to fulfill them ourselves—creating a ripple effect of regulation and stability.

Neurosculpting Meditation for Emotional Balance

A guided meditation can help release emotional tension stored in the body. The process involves:

1. Becoming aware of the **present moment** by focusing on gravity and breath.
2. Activating **creative thinking** to shift emotional states (e.g., imagining a singing rainstorm).

3. Identifying and **visualizing** negative emotions as colors, textures, or sensations.
4. Noticing where emotions are stored in the body and **releasing** them through imagination or movement.
5. Creating a **hand gesture** or **affirmation** as a reminder of emotional balance.

This meditation serves as a powerful tool to process emotions, allowing us to approach difficult conversations and relationships with a **renewed sense of control and clarity**.

Recap Lesson 4

Meditation serves as a rehearsal script for the social brain, allowing for a shift in emotional responses. Neurosculpting follows five steps (not detailed in this course), but the guided meditation includes:

1. **Landing in the body** – Becoming present and receptive.
2. **Activating creativity** – Engaging the mind while the body remains relaxed.
3. **Recognizing the old script** – Identifying emotions, associations, and bodily responses.
4. **Editing the script** – Using breath, imagination, and movement to change the response.
5. **Marking the change** – Associating it with a hand gesture and affirmation for reinforcement.

Homework:

Since neuroplasticity thrives on repetition, practice involves:

- **Repeating the meditation** several times a week.
- **Daily practice** (3x a day):
 - One-minute deep breathing.
 - One-minute physical shaking.
 - Using the hand gesture and affirmation.

Do not underestimate the value and the power of telling your brain stories. That is how you got here. Your brain has told you stories, so now you are laying down the script for a new story.

Lesson 5: Managing the Emotional Hijack Before It Happens

This lesson focuses on preventing emotional hijacks by conditioning the nervous system for resilience and adaptability. A well-conditioned nervous system reduces extreme reactions.

Key Concepts:

- Emotions are managed by training the nervous system, not just by understanding triggers.
- Daily practices (breathing, shaking, reframing) help build resilience.
- Small, consistent exercises prevent emotional overwhelm.

Practical Steps:

1. **Shaking practice** – 10–20 seconds multiple times a day.
2. **Breathing exercises** – Learn to recognize breath patterns (inhale = gas, exhale = brake) to regulate emotions.
3. **Reframing thoughts** – Combine with physical techniques for long-term adaptability.

Recognizing Early Signs of Stress:

- **Fight-or-flight:** Muscle tension, fast breathing, sweating, digestive changes, fixated thoughts.
- **Freeze response:** Holding breath, brain fog, difficulty tracking thoughts, avoiding eye contact.

By recognizing these signs early, you can intervene before a full emotional hijack occurs. Daily practice is essential—just like brushing your teeth—to maintain long-term emotional health.

Homework for Lesson 5

Create a **daily accountability plan** to integrate nervous system resilience practices into your routine. Schedule specific times in your calendar, phone, or planner to practice **shaking, breathing, and self-check-ins** at least twice a day.

During check-ins, ask yourself:

- *What am I feeling?* (Even if nothing external is wrong.)
- *Is my body regulated or showing signs of stress-responses?*
- *Can I intervene now?*

After completing your practices, **journal your reflections**, noting:

- Your body's state before using the tools.
- Any mental shifts during breathwork.

This practice helps build long-term emotional resilience.

Lesson 6: Moving from Victim to Victor

This lesson focuses on shifting from a victim mentality to an empowered mindset. While life brings unfair and traumatic experiences, expecting constant victimization leads to chronic stress, affecting both mental and physical health.

Key Concepts:

- A victim mindset is when someone expects unfair treatment in all situations, which activates the mid-brain and heightens stress responses.
- Chronic stress from a victim mentality disrupts the immune system, digestion, heart rate, and overall well-being.
- Separating unfair experiences from a victim mindset is essential for emotional regulation and resilience.
- Neuroplasticity and somatic practices can help rewire the brain for empowerment instead of fear and negativity.

Daily Practices for Empowerment:

- Engage in physical practices like shaking and vagal toning exercises.
- Ask yourself key questions:
 1. Am I starting the day with a “poor me” attitude?
 2. How much of today can I meet with curiosity?
 3. What can I control in my world?
- Create a sphere diagram categorizing what’s within and outside of your control. Review it weekly to ensure focus remains on manageable areas.

Homework:

- Ask yourself the three key questions daily.
- Create and regularly update a sphere diagram to track where you invest your energy.

Summary of Lesson 7: Putting it all together

In this lesson, the focus is on integrating all the practices learned in the course into a manageable daily routine. The goal is to avoid feeling overwhelmed by applying one practice at a time to promote emotional regulation. The plan covers a Monday through Friday schedule, with weekends reserved for relaxation and spontaneity. The core principle is daily commitment to small, consistent practices for neuroplastic change, which will eventually lead to an empowered and regulated emotional state.

Timetable for Weekly Exercises:

Day	Practice	Details
MONDAY	Breathing	Focus on breathing based on your body's needs (e.g., exhale if holding breath, accelerated inhale if no breath).

TUESDAY	Vagal Toning	Perform either shaking or cold water on the face to tone the nervous system.
WEDNESDAY	Meditation	Engage in a meditation practice (at least once; repeat if possible).
THURSDAY	Self-reflection	Ask key questions: “Am I starting with a ‘poor me’ mindset?”, “How can I meet today with curiosity?”, “What can I control?”.
FRIDAY	Sphere Reflection	Reflect on where you spend your time (inner vs outer sphere), then realign yourself.

Weekend: No scheduled practices—time to rest and be spontaneous.

This routine promotes emotional regulation and empowers you to manage your nervous system through small, intentional daily practices, ultimately building the future you want through consistent effort.