



The Family Recovery Foundation
FIX YOUR FAMILY
MODULE 5

Understanding Codependency III

Codependency and the Brain and Body

Research on codependency and its effects on the brain is still developing, but there are several insights from related fields such as psychology, neuroscience, and mental health studies that can help us understand the potential impact of codependency on brain function and mental well-being. Here are some key points:

1. Emotional Regulation: Codependency often involves difficulties in emotional regulation. Chronic stress and anxiety associated with codependent behaviors can affect the brain's limbic system, particularly the amygdala and hippocampus. These regions are involved in processing emotions and memories.

The **hippocampus**, responsible for memory and emotional regulation, shrinks due to prolonged cortisol exposure.

Consequences include:

- **Memory issues** (forgetfulness, difficulty recalling details)
- **Emotional dysregulation** (increased irritability, depression)
- Difficulty breaking out of **negative thought loops** (reinforcing codependent behaviors)

2. Neuroplasticity: Codependent behaviors are learned and reinforced over time, which can change the brain's neural pathways due to neuroplasticity. **Negative thought patterns and behaviors can become ingrained, making it difficult to change without intervention.**

Common Brain Patterns in Relationships with Addiction

1. Monitoring the Addict's Mood

Pattern:

Living with addiction often means dealing with unpredictable moods, behaviors, and substance use. Over time, family members begin scanning the environment to anticipate emotional shifts or potential conflict.

Brain Effect:

The brain strengthens hypervigilance pathways. The amygdala becomes more active, and the nervous system stays on alert for signs of instability or danger.

Example Thoughts:

“Are they okay today?”

“Did I do something wrong?”

“Something feels off... I need to figure out what it is.”

The brain begins to associate safety with constantly reading the room.

Skill:

Practice bringing attention back to your own body and breath instead of scanning the other person. Ask yourself, “What am I feeling right now?” rather than trying to predict someone else's mood.

2. Taking Responsibility for the Addict's Stability

Pattern:

Family members often try to stabilize the situation by helping, fixing problems, or preventing consequences for the addict.

Brain Effect:

The brain begins linking relief and reward to solving the addict's problems. Dopamine pathways reinforce the rescuing behavior.

Example Thoughts:

“If I can just help them enough, things will get better.”

“Maybe I didn't support them enough.”

“If I don't step in, everything will fall apart.”

The brain begins to associate self-worth with fixing problems.

Skill:

Begin practicing the question: “Is this my responsibility or theirs?” Allow the person to experience the natural consequences of their choices.

3. Avoiding Conflict to Prevent Escalation

Pattern:

When conflict leads to arguments, emotional volatility, or threats of relapse, family members learn that confrontation can make situations worse.

Brain Effect:

The brain pairs assertiveness with danger. Neural pathways begin linking conflict with instability.

Example Thoughts:

“I don’t want to upset them.”

“This might make things worse.”

“Maybe it’s better if I just let this go.”

The brain pathway becomes:

Conflict → instability → avoid.

Skill:

Start with small, calm expressions of truth such as “I feel uncomfortable with that” or “That doesn’t work for me,” allowing your nervous system to learn that respectful honesty can be safe.

4. Seeking Reassurance

Pattern:

Addiction often creates emotional inconsistency, where connection and distance alternate unpredictably.

Brain Effect:

The brain begins relying on reassurance from the addict to calm anxiety and restore emotional balance.

Example Thoughts:

“Are you mad at me?”

“Are we okay?”

“Do you still care about me?”

The brain learns to associate reassurance with temporary safety.

Skill:

Practice grounding yourself first by slowing your breathing or pausing before seeking reassurance, reminding yourself that your emotional stability does not have to depend on someone else’s response.

5. Holding on to the Good Moments

Pattern:

Relationships with addiction often include cycles of chaos followed by moments of closeness, apology, or affection.

Brain Effect:

The dopamine reward system becomes activated through intermittent reinforcement, similar to gambling patterns.

Example Thoughts:

“When things are good, they’re really good.”

“I know the real person is still in there.”

“If we can just get back to how things were, everything will be okay.”

The brain becomes wired to chase the reward.

Skill:

Practice evaluating the overall pattern of the relationship rather than focusing only on the good moments. Ask yourself, “What has the pattern been over time?”

6. Ignoring Personal Needs

Pattern:

Over time, attention becomes focused almost entirely on the addict and the stability of the relationship.

Brain Effect:

The brain begins deprioritizing internal signals such as personal needs, limits, and emotional awareness.

Example Thoughts:

“This isn’t about me.”

“My needs can wait.”

“I’ll deal with myself later.”

The brain pathway becomes:

Others first → self later.

Skill:

Begin regularly asking yourself, “What do I need right now?” and take small actions to meet your own physical and emotional needs.

3. Prefrontal Cortex: The prefrontal cortex, which is responsible for executive functions such as decision-making, impulse control, and social behavior, can be impacted by the stress and emotional turmoil of codependency.

*This means codependent individuals may struggle with **rational decision-making, emotional stability, and setting healthy boundaries**, reinforcing their patterns of over-focusing on the addict*

4. Hyperactive Amygdala (Fear & Emotional Reactivity)

The **amygdala**, the brain’s fear and emotional processing center, becomes **overactive** due to constant stress.

This leads to:

- Heightened **anxiety and emotional reactivity**
- Increased **fear-based thinking**, reinforcing the obsessive focus on the addict
- Difficulty in distinguishing real threats from perceived ones (e.g., feeling a constant need to intervene in the addict’s behavior) (Rooszendaal, McEwen, & Chattarji, 2009).

5. Biological Impact

Chronic Adrenaline & Cortisol Dysregulation

High cortisol levels lead to:

- **Immune system suppression**, making individuals more prone to illness
 - **Increased inflammation**, contributing to conditions like autoimmune disorders
 - **Digestive issues** (IBS, ulcers, leaky gut)
 - **Heart problems**, including increased risk of hypertension and heart disease
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- Adrenaline overuse causes:
 - **Chronic fatigue and adrenal burnout**
 - **Increased sensitivity to stress**, making minor stressors feel overwhelming
 - **Insomnia or disrupted sleep patterns**, further worsening emotional resilience

6. Dopamine Dysfunction – Reward System Hijacking

Codependents may experience **dopamine dysregulation**, meaning:

- They derive **reward (dopamine release) from taking care of the addict** rather than from self-care or personal achievements.
- Over time, the **brain rewires itself to prioritize the addict's needs over its own**, making it harder to break the cycle of codependency.

Overall, direct research specifically linking codependency to specific brain changes relating to stress, emotional regulation, and attachment provide valuable insights into how codependency might affect the brain.

Final Thoughts on Codependency and the Brain

Codependency is not just a relational or behavioral issue—it is deeply tied to brain function, emotional regulation, and overall well-being. As we've explored in this module, chronic stress, emotional dysregulation, and deeply ingrained thought patterns can shape neural pathways in ways that reinforce codependent behaviors. The impact on key brain regions, such as the prefrontal cortex, amygdala, and hippocampus, can make it challenging to set boundaries, regulate emotions, and make rational decisions.

However, the brain's neuroplasticity also offers hope. Just as codependent behaviors are learned and reinforced, they can also be **unlearned and rewired**. By engaging in intentional healing practices—such as therapy, mindfulness, self-care, and healthy relational boundaries—individuals can begin to shift their neural patterns, regain emotional balance, and reclaim their sense of self.

Understanding the biological and neurological effects of codependency empowers us to move beyond self-blame and into action. Healing is not just about changing behaviors—it's about rewiring the brain to support a healthier, more autonomous, and fulfilling life. With awareness, support, and consistent effort, transformation is possible.

Reference

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- Roosendaal, B., McEwen, B. S., & Chattarji, S. (2009). **Stress, memory and the amygdala**. *Nature Reviews Neuroscience*, 10(6), 423–433. <https://doi.org/10.1038/nrn2651>