

Praying through Anxiety

Lesson 2: Resting and Connecting

Vocabulary:

| | | | |
|-------------------------------|----------------|---------------------------|--|
| symptom | permanent | to regulate | efficient |
| ability (ant. inability) | to circulate | to inhale (adj., inhaled) | neural |
| to scan (n. scan) | aerobics | to exhale (adj., exhaled) | result (v. to result) |
| to flow (also, n. blood flow) | relaxation | rhythm | to visualize (n. visualizing, adj. visual) |
| to manage | psychiatrist | pace | to gaze upon |
| to activate | brain disorder | irregular | dependence |
| to trap (adj. trapped) | specialist | to get our mind off | brain stem |
| loop | to numb | pathway | to recall |
| to reason through | to set aside | hemisphere | pattern |
| method | territory | band | raft |
| temporary | exile | nerve | torso |
| relief | rejuvenation | task | security |
| long-lasting | to endure | operation (or function) | |

Discussion:

One of the **symptoms** of anxiety is the **inability** to stop negative thoughts that cause the mind and body to feel stressed. Today, doctors use **scanning** machines to see exactly what is happening inside the brain the moment a person experiences these feelings. These types of scans are called SPECT [SPEKT] or fMRI [F-M-R-I] scans. These scans show where blood is **flowing** inside the brain. The doctor might see one area that is very bright, meaning that this part of the brain is highly **activated** during anxiety, while another area of the brain created to help **manage** these anxious thoughts is dark.¹

Based on what you now know about brain scans, why do we have trouble stopping anxious thoughts? Why do you think we have difficulty thinking when we are anxious?

We may have trouble stopping anxious thoughts because blood that should be traveling throughout our brains to help us balance our thinking is stuck in one or more areas of the brain. This can keep us **trapped** in a **loop** of anxious thoughts. We need the front part of our brains **to reason through** these thoughts. But if blood has moved away from that area, then we may have a hard time processing our problem in a logical or healthy way.

So, what if we could move the blood to other parts of our brains? Moving the blood can help, depending on *how* we move that blood. Some **methods** will produce **temporary relief**, while other methods produce **long-lasting** change inside our brains. Yet even methods that produce temporary relief can open the doors for real change to begin. We're going to discuss some of these temporary, yet important, methods first.

¹ Amen, M.D. defends that SPECT studies are superior to fMRI studies when examining the brain. His description of SPECT studies can be found in Daniel G. Amen, *Change your Brain, Change your Life*, (New York: Three Rivers, 1998) 16-24 with a comparison on 292.

What are some activities we can do to move blood inside our body and brain?

One of the first activities you might have listed is exercise. When Paul is speaking to Timothy about training the mind to be godly, he says this: “For physical training is of some value, but godliness has value for all things, holding promise for both the present life and the life to come (I Timothy 4:8, NIV). Paul was right when he said that physical training or exercise has some value when training our minds to think in healthy ways. The value isn’t **permanent** the way training in godliness can be permanent, but it can be enough to **circulate** blood inside our brain and change our mood. This movement of blood and change in mood create opportunities for more permanent change that we’ll discuss more in the next lesson.

Anything that increases **blood flow** throughout our bodies can help to balance our minds temporarily: walking, jogging, swimming, bicycling, sports, **aerobics**, or weightlifting are some examples. While all these activities may have similar effects, multiple scientific studies show that walking, especially longer distances in green areas, improve anxiety, mood, and overall mental health.² You might also notice that your mind relaxes after a hot shower, drinking warm liquids, or even wearing a warm hat, other ways to get blood to our brains.

Even the opposite of “activity” – **relaxation**, silence, and rest – can also have powerful effects on moving the blood throughout our brains. Dr. Daniel Amen, a **psychiatrist** and **brain disorder specialist**, says that we need 20-30 minutes of quiet relaxation daily and time alone to balance one area of the brain that can cause anxiety: the basal [BAY-zul] ganglia [GAYN-gee-uh]. So, does any type of rest accomplish this? Not necessarily. While watching movies in bed might **numb** the brain, Amen recommends rest along with deep, regular breathing to increase the **ability** for oxygen to circulate blood inside the brain.³

How do people rest in our societies today? What do you think are healthy forms of rest?

What does the Bible say about rest?

The idea of “rest” is found throughout the Bible, and specifically in the form of Sabbath rest. We see God resting after he created the world. In the same way, one of the first commands the Lord gives to his people in c. 1500 B.C.E. is **to set aside** a day of rest for prayer and worship so that they would remember the Lord and rest from their work. This was called Sabbath rest. When Joshua conquered Israel for the Jewish people, the Lord also gave them rest from their enemies on every side of their new **territory**. Like Joshua, the Lord promised Solomon “rest on every side” from his enemies because Solomon devoted himself to building the first temple where the Jewish people worshipped. In the 5th century B.C.E., this temple was destroyed, and the Jewish leaders were captured by the King of Babylon. When Ezra, a teacher of God’s laws, brought the Jewish people out of Babylonian **exile** to rebuild their temple of

² Junia N. de Brito, Zachary C. Pope, Nathan R. Mitchell, Ingrid E. Schneider, Jean M. Larson, Teresa H. Horton, and Mark A. Pereira. Changes in Psychological and Cognitive Outcomes after Green versus Suburban Walking: A Pilot Crossover Study. *Int J Environ Res Public Health*. 2019 Aug; 16(16): 2894. Published online 2019 Aug 13. doi: 10.3390/ijerph16162894; Martin Mau, Anders Aaby, Søren Harnow Klausen, and Kirsten Kaya Roessler. Are Long-Distance Walks Therapeutic? A Systematic Scoping Review of the Conceptualization of Long-Distance Walking and Its Relation to Mental Health. *Int J Environ Res Public Health*. 2021 Aug; 18(15): 7741. Published online 2021 Jul 21. doi: 10.3390/ijerph18157741.

³ Ibid, Amen, 99-101.

worship, the group rested for three days after arriving in Jerusalem (Ezra 8:32). Rest for rejuvenation and worship is a major theme in the Old Testament!

How do you rest? How often do you rest? How do you want to grow in rest?

Like the rest Dr. Amen recommends, Biblical rest also involves silence and alone time. When speaking against the enemies of Israel, the prophet Isaiah said, “Be silent before me, you islands! Let the nations renew their strength!” (Isaiah 41:1, NIV). Jesus also practiced quietness and silence. In Mark, we learn that when Jesus wanted to spend close time with the Lord, “He left the house while it was still dark and went to a place where he could be alone to pray” (1:35, ERV). In Luke, Jesus even spent the night away from his home to get quiet moments with the Lord: “One of those days Jesus went out to a mountainside to pray and spent the night praying to God” (6:12, NIV). Luke also noted that “Jesus often went away to other places to be alone so that he could pray” (5:15-16, ERV). Even when Jesus was going to be nailed to a cross and beaten by Roman soldiers, he used silence to endure the pain he suffered: “He did not open His mouth. He was taken like a lamb to be put to death” (Isaiah 53:7, NLV). If the Son of God needed rest and silence to quiet his mind and hear the Lord, how much more do we need that quiet alone time for rest?

In ancient Jewish times, families were large, and people often slept in the same room. People woke up when the sun rose to begin their work. How did Jesus find quiet rest?

Think about your life. What are the best time and places where you can find quiet rest for your mind and times with the Lord?

Dr. Amen’s theories agree with the Bible – that resting the mind is key to overcoming anxiety. He encourages deep, regular breathing from the belly to relax the mind. Biofeedback [BY-o-FEED-bak] is a modern practice that teaches us how to regulate our breathing to relax the brain. For example, we might breathe in for five counts through our nose and breathe out five counts through our mouths. The goal is to increase the counts of our inhaled and exhaled breaths, while keeping the rhythm of a normal breathing pace. Biofeedback teaches that an irregular breathing pace can activate our “fight or flight” (fear and run) response and keep us in a less peaceful state.

While getting oxygen and blood to the brain has a powerful effect, there are still other healthy activities that can move blood away from one area of the brain where blood is trapped that to another, more comforting, area. This movement from one area to another can also help to stop the anxiety temporarily: reading a book, working puzzles or math problems, listening to relaxing sounds or music, or even watching funny videos. These activities move blood inside the brain by activating other areas of the brain. They allow us to get our mind off our problem and calm our anxious thoughts. There are still other activities, however, that move blood to multiple areas throughout the brain and form pathways among different regions that process information. Evidence suggests that such strategies can be even more effective in balancing and growing our brains.

Why do you think an overall increase in blood flow throughout the brain and creating pathways among regions may have a stronger impact on our brain health than a single activity that moves blood from one major area of the brain to another?

The brain is divided into two equal parts called **hemispheres**. These hemispheres are connected by a long **band** of **nerves** down the center of the brain called the *corpus* [KOR-pus] *collosum* [kuh-LO-sum]. When we process information and thoughts, we use both sides, or hemispheres, of the brain. But neuroscientists [NUR-o-SY-in-tists], scientists who study the brain, have discovered that very specific **tasks** or **operations** are performed mostly in either the left or right-side hemisphere. Some tasks are also shared almost equally between the hemispheres.⁴ Yet, for information processes to be **efficient**, regions *across* hemispheres must be able to communicate effectively with one another.

The corpus collosum is partly responsible for directing the side of the brain in which information is processed and allows regions across hemispheres to communicate. As this communication improves, the corpus collosum grows in size and strength. As pathways connect among regions across hemispheres through the corpus collosum, a person's overall ability to process information improves,⁵ including the ability to manage thoughts and emotions. In the same way, if the corpus collosum decreases in size, the **result** is a decrease in overall **neural** communication throughout the brain.⁶

Studies using brain scans show that stronger connections among regions **result** from a person performing tasks that activate these areas of the brain during information processing. The stronger and more numerous the connections, the higher the brain performs.⁷ For these reasons, the goal of activities that increase blood flow throughout the entire brain is to increase opportunities for this whole brain communication to occur. Such tasks or operations might include hearing or listening (i.e. to music), speaking, seeing or **visualizing**, moving (i.e. dancing, building, drawing), expressing emotion, reading or reciting, writing, remembering (including memorizing), naming, reasoning, and examining oneself.

Can you think of any ways people in the Bible used multiple parts of their brains in their walks with God?

One thing we notice about Jesus is that he often used different parts of his brain in his relationship with his Father. We see him going outside to the top of a mountain to pray. In this way, he used his eyes **to gaze upon** and climb a mountain that God had created, his voice to speak to God, and his imagination to connect to God whom he could not see. He went to a desert to experience **dependence** and hunger. He listened with his mind and recited scripture when tempted. He expressed deep emotion, crying out to God with loud cries and tears. In a similar way, the apostle John relaxed his mind so much in prayer that he experienced visions that activated the visual part of his brain. He also wrote what he saw, which not only activated his **brain stem** located in the lower backside of his brain but also his long-term memory, a way for John **to recall** later what he had experienced and seen. Paul instructed the followers from Ephesus [EH-fih-sus] and Colossae [koh-LAH-see] to meditate on scripture and sing songs in their hearts to encourage their minds. Do you remember the verse, "Love the Lord with all your mind" (Mark 12:30, NIV)?

⁴ Georg Deutsch and Sally Springer, *Left Brain-Right Brain: Perspectives from Cognitive Neuroscience*, New York: W.H. Freeman and Company Worth Publishers, 1998, 25, 28-9, 83; David Levitin, *Foundations of Cognitive Psychology: Core Readings*. Cambridge: The MIT Press, 2002, 819.

⁵ Ibid, Deutsch, 224.

⁶ Fryer, Susanna Fryer, and Lawrence Frank, Bonnie Nagel, Alecia Schweinsburg, Andrea Spadoni, Susan Tapert, and Rebecca Theilmann, "Microstructural Integrity of the Corpus Callosum Linked with Neuropsychological Performance of Adolescents," *Brain and Cognition* 67.2, (2008): 225-233, 225.

⁷ Robert Sternberg and Jean Pretz. Ed., *Cognition and Intelligence: Identifying the Mechanisms of the Mind*, Cambridge UK: Cambridge University Press, 2005, 96.

We have many examples in the Bible of men and women using many parts of their brains to love the Lord. All these activities can powerfully impact not only our walk with God but can also greatly calm our anxious minds.

In your walk with the Lord, how do you use multiple parts of your brain? Consider the examples above or add some of your own!

While many types of rest and activities can be healthy and helpful to our minds, resting with regular breathing, while performing tasks that activate multiple areas across hemispheres of the brain, can have positive and powerful effects on calming anxiety. Try this exercise to learn how multi-regional connections and breathing can help you to relax. You can lengthen each set as needed and practice it anywhere you are able, even in the shower or when taking a walk:

Step 1: Close your eyes and begin breathing from your belly. With regular breaths, begin counting as you inhale through your nose and exhale through your mouth so that the numbers that you count when inhaling equal the numbers you count when exhaling. Example: Inhale – 1, 2, 3, 4, 5 and Exhale – 1, 2, 3, 4, 5. Try to visualize each number in your mind. Repeat this breathing set 3 times.

Step 2: Continue in the same breathing pattern but count backwards when you exhale. If you begin taking deeper breaths, increase your count. Example: Inhale – 1, 2, 3, 4, 5, 6 and Exhale – 6, 5, 4, 3, 2, 1. Try to visualize each number in your mind. Repeat this breathing set 3 times.

Step 3: Select a spiritual word, like “Jesus” or “peace.” If your breaths are longer, select a phrase like “Lord Jesus” or “love peace.” Continue breathing regularly but spell the word(s) instead of counting. Try to visualize each letter in your mind. Repeat this breathing set 3 times.

Step 4: Continue in the same breathing pattern but spell the word or phrase backwards when you exhale. Take your time when you exhale, and try to visualize each letter in your mind. Example: Inhale – J-E-S-U-S and Exhale – S-U-S-E-J. Repeat this breathing set 3 times.

Step 5: Now, let your mind relax, and imagine that you are on a beach with the waves rolling onto the shore. As you inhale, let your mind travel a little way into the ocean to a large wave. As you exhale, imagine the wave moving slowly toward the shore. Don’t let your mind race back to the shore. If needed, you can return to counting frontwards as you inhale, and your mind goes out into the ocean, and backwards as you exhale and the wave travels onto the shore. You may find that the length of your breaths has increased. Repeat this breathing set 3 times.

Step 6: Repeat Step 5 but imagine the sounds of the waves as you breathe.

Step 7: In your mind place yourself on a raft. As you inhale, imagine that you are swimming out into the ocean to the large wave. When you exhale, feel your body on the waves as your raft follows the rhythm of the waves to the shore. Listen to the sounds of the waves as you travel. Repeat this breathing set 3 times.

Step 8: If comfortable, repeat Step 7 using your arms to gently swim out the large wave. Allow your body – your arms and torso – to experience the rhythm of the waves as you slowly return to shore. Repeat this breathing set 3 times.

Step 9: Continue with Step 8, but now imagine Jesus standing at the edge of the shore. His arms are wide open to you and welcoming you onto the shore. He is smiling because he's happy that you are playing and relaxing in the ocean that he created for you! Repeat this breathing set 3 times.

Step 10: When you arrive at the shore where Jesus is standing, take your arms that you were using to return to shore and wrap your arms around Jesus's shoulders as he lifts you to himself. He wraps his arms around you and holds you like his child, rocking you back and forth. Wrap your own arms back around your own shoulders and rock gently as Jesus rocks you in his arms. Let your head rest on his shoulder and feel the comfort and security of his love. Repeat this breathing set 3 times.

Step 11: As you continue rocking in Jesus's arms with your own arms around your shoulders, speak this verse (or another verse that comforts you):

To those who receive him, to those who believe in his name, he gives the right to become children of God. Children born not in natural ways or by human decision or by husband's will but born of God. (John 1:12-13)

Repeat this verse 3 times.

What did you experience from this exercise? Was any part of it hard for you? What would you change about it?

These types of exercises can be adapted for almost every type of brain and can be used when anxious feelings arise. While this exercise may not solve the source of our anxieties, it moves blood away from the anxious area of the mind and opens pathways for other regions to support the healing process. Now that the pathways between regions are open and connected, we will explore in the next lesson more specific Biblical strategies designed to heal the source of our anxiety where we can begin to see real and lasting change.

This Week:

Write in your journal:

1. Continue this week reading the book of Philippians. Write what you learn and any scriptures that encourage you. Write these verses on cards and read them during the day.
2. Begin your daily time of prayer with the relaxation exercise above and some silent time before the Lord. From there, begin to pray from your own mind. Invite other parts of your brain to join your relationship with the Lord. You can add singing, dancing, walking, going to a special place outside, writing, reciting or memorizing verses, sharing emotion, crying out to God, drawing, using your gifts of the Holy Spirit, visualizing heaven, or something else! Enjoy loving the Lord with all your mind!