How Prayer Rewires the Brain

By Elizabeth (and Joy) Schmus



A child has various education and school objects on his head with a isolated background. Subjects are art, science, technology and nature.

Did you know that spending daily time in prayer actually causes measurable changes in our brains? I was so inspired by this research my high school daughter Joy discovered that I knew I had to share it with you my "Prayer Hack" and Church Prayer Leaders Network friends! Here is an excerpt from the speech Joy wrote:

Not only does prayer do something in the spiritual realm, connecting us with God, it literally rewires our brain. This was demonstrated by a study done by radiologist Andrew Newberg. When he was starting around 2000, it was believed that the brain could not grow after adulthood. But he did a study in 2003 that used an MRI to scan the brains of people who believed in God and a control group. Then he asked those

who believed in God to pray 12 minutes a day. The findings were astounding.

The cingulate cortex part of the brain of the people who prayed grew noticeably. The cingulate cortex is the part of the brain that manages emotions, emphatic thinking and feeling. When this cortex grows, it essentially means you become a nicer and more forgiving person.* Prayer literally helps us to follow Jesus's commandment in Matthew 5:44 to "...Love your enemies and pray for those who persecute you." This cortex is key to overriding the self-preservation mindset which is our brain's default mode.*

Prayer also decreases the activation of the amygdala, the part of the brain responsible for the fight or flight mechanism. This helps decrease blood pressure and heart rate, as well as depression, anxiety, and even PTSD. And because of the decrease of activity in the amygdala, most decisions instead go to the frontal cortex, which increases self-control and discipline.* And this was with just 12 minutes of prayer a day.

Wow! Who among us couldn't use some brain growth like this? I know as a busy educator I often think I don't have time for a formal "quiet time" with the Lord. I think I'll wait until I have a full hour to read the word, pray, and listen to my Father. Of course there are the continual "help me Lord" prayers that I pray throughout the day as needed, but I have so often not taken the time to really pray well because I think my prayers have to be long and cover everything. But I often have just 12 minutes! I often worship aloud in my car as I drive, or stop and pray with someone who is hurting. It's so encouraging to know that even the "loaves and fishes" of my time I spend in prayer is growing my brain in ways scientists can measure.

Discovering this research made me wonder, how could I plan to

spend more time in prayer this year? Praise him during my 12-minute shower or as I got ready for the day? What about praising him as I drive to and from work? Could I squeeze in just 12 minutes of prayer with a colleague at lunch time? Or before or after school? Maybe a 12-minute prayer walk on my campus or around my neighborhood while I'm walking the dog? How about a 12-minute prayer time after dinner with my family or even as I fall into bed at the end of the day? How might my brain and my life grow as a result?

"Do not be anxious about anything, but in every situation, by prayer and petition, with thanksgiving, present your requests to God and the peace of God, which transcends all understanding, will guard your hearts and your **minds** in Christ Jesus."

Philippians 4:6-7 LITERALLY!

How will you squeeze 12 minutes of prayer into your daily routine?

*Liedke, Michael. "Neurophysiological Benefits of Worship." The Journal of Biblical Foundations of Faith and Learning, vol. 3, no. 1, 2018, https://knowledge.e.southern.edu/cgi/viewcontent.cgi?article=1063&context=jbffl. Accessed 20 December 2021.

About the Author

Elizabeth Schmus has a B.A. in English from Pepperdine University and an M.A. in Educational Leadership from Biola University. She currently serves Christian Educators Association International alongside her husband David of 29 years. While she's taught elementary to college professionally in public and private schools, her favorite teaching assignment has been homeschooling their three daughters.