



## GPS: Grow, Pray, Study Guide 2.15.15

Neuroscience has shown that the brain changes with experience.

Taxi drivers who have ferried passengers around London for years have larger hippocampi, a region of the brain important for spatial awareness and memory, compared to newer cab drivers.

Similarly, experienced musicians show higher grey matter volume in motor, auditory and visual-spatial regions, suggesting their brains have been altered through daily practice.

When the brain is damaged – such as during a stroke – it is possible to recover lost capacity through therapy. Other areas of the brain take over from those damaged. The brain’s ability to adapt in response to experience is known as neuroplasticity. Just as exercise affects the body, the same is true of the brain. This process can happen quite quickly: learning to juggle or play the piano over just a few days alters brain density.

This is empowering news because it suggests that we aren’t stuck with our old brains and our old habits. We can plough new furrows, cultivating freedom to shape the future, based on what we do in the present, or how we train the mind.

Researchers have explored the neuroplastic changes that occur with mindfulness training, and are finding that practitioners’ brains seem to reflect their expertise. Activity, structure and volume are different in parts of the pre-frontal cortex, the area of the brain which is associated strongly with reasoning and decision making. Experienced meditators also show high levels of gamma wave activity, which is thought to be related to increased awareness.

Changes start to be seen in the brains of new meditators after a few days or weeks of training. As they practice mindfulness, regions of the brain related to learning, memory, mind-body awareness, cognitive control, emotional reactivity, sense of self and other markers of wellbeing are all affected.

It doesn’t take much, it appears, for patterns of activity in the brain to shift. As new grooves are formed in our ways of seeing, relating and behaving, so these are reflected and perhaps reinforced by neural shifts.

–Extract from *Mindfulness: How To Live Well By Paying Attention*, by Ed Halliwell, published by Hay House Basics on 5 Jan 2015.

## Who Are You? Who Are We?

We are people in need of meaning and memory – and ritual forms our way of seeing, relating and behaving.

Ritual is a way of paying attention to space, time, matter, and people. It makes meaning, helps us see greatness in small things, creates places of safekeeping and memory. It protects



the marvels of the commonplace from those who would devalue them in order to consecrate a human being to God and to communicate to that person the divine gift of birth from God.

John Wesley was keen to point out that baptism is not simply a ritual devised by men, which might easily be dismissed, but rather a sign of the covenant which God has given to us through Christ, who “alone has the power to institute.” Wesley understands baptism as having divine origins and purposes.

Sacraments like baptism (and the honoring of the ritual by retelling the story each year with lighting the baptism candle) and more regular participation in sacraments like Holy Communion are the means of grace by which we show up in our relationship with God. It’s a way of cultivating attention of the holy in our lives. Through regular habits of prayer and worship we practice mindfulness and these patterns of activity cause our brain to shift.

🎵 Welcome, Child of God  
Raindrops, oceans, lakes, and rivers; welcome, child of God.  
Mother, father, brothers, sisters; welcome, child of God.  
When the world feels wide around you,  
when the dark of night surrounds you,  
we are here to end and guide you.  
Welcome, child of God.

To the Old Welsh tune of “All Through the Night”