

# The Lawyers Mind: Endurance

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As a young lawyer in the late 1970s, I marveled at how my colleagues working for large law firms, (now called “Big Law”) could work at least 12 hours per day for at least four days a week and then some on weekends. My observation was that they were often physically and mentally exhausted as they plodded along to meet the mandates of the billable hour. Some boasted that they averaged less than five or so hours a night of sleep without any loss of ability. Hmmm, I thought, as I politely did not contest the point — they were making the big bucks and had solid academic and other credentials. They were smart people in the prime of their lives.

This was before the onslaught of technology changed the way we worked. Our daily tasks were mostly reading and writing on yellow legal pads and some telephone and meeting time. I did not believe that a lawyer could achieve optimal performance with the mind forced to focus and concentrate on a marathon legal march. I once said to a Big Law colleague that he was like a record player, alternating at mental speeds of 33, 45 or 78 revolutions per minute with just small pauses as the records were changed.

Fast-forwarding to the 21st century, how we work has been transformed beyond my wildest imagination. We have evolved to where lawyers, and most people, work

and live each day facing screens of various sizes. We exercise visual and motor skills as much if not more than mental acuity, as our muscle memory dances across our keyboards more than our dance floors and bike paths.

Lawyers have always faced the challenge of mental fatigue. This affects our decision-making efficacy and capacity. Our ability to engage in sustained critical thinking in a world of electronic dependency and distraction is integral to success in our chosen business. In the past, I have written about how even in a single day, the decision-making quality can deteriorate or be negatively impacted by fatigue where the brain defaults to the easier path of accepting the status quo or taking shortcuts to conserve energy. I now expand this concept by exploring cognitive endurance, a branch of cognitive science that involves mental stamina, focusing on serial decision-making, and takes a broader perspective on cognitive health.

## The Science of Cognitive Endurance

Cognitive endurance is commonly described as the capacity to sustain mentally demanding tasks over an extended duration on a continual, if not continuous, basis. Cognitive endurance is critical to lifelong brain health, optimizing productivity and performing at your best.

Cognitive researchers consider a variety of topics related to thinking processes. Some of these include:

- Attention: ability to process information while filtering out irrelevant details.
- Choice-based behavior: actions driven by choosing among various possibilities.
- Information processing: how human process information (like how computers handle data).
- Memory: related to the encoding, storage, and retrieval of information.
- Speech perception: how we process spoken language and understand what others are saying.
- Visual perception: how the world is perceived and interpreted, and stimuli processed.

All are integral to explaining and enhancing decision-making and cognitive endurance.

Our biology, including the brain itself, is central to all matters cognitive. Each day scientists learn more about the wiring of the brain and how the trillions of neurons interact on a chemical and electrical basis. The cerebellum, occupying only about 10 percent of the brain's volume, hosts over 50 percent of its total neurons and is central to understanding and optimizing brain function and cognition. Scientists contend that it is essential to engage both hemispheres of the brain to achieve a cognitive balance and efficiency. This requires active participation, exploration and a commitment to lifelong learning within the three-dimensional world, as opposed to passive interactions with flat screens.

*We must never become too busy sawing to take time to sharpen the saw.*

— Dr. Stephen R. Covey

### **The Problem (or Problems and Challenges)**

When lawyers have too much work to do in too little time or travel or engage in remote meetings when they should be sleeping because of clients in different time zones, the deleterious effect may be significant over both the short and long haul. Professor Yuka Sasaki of the Department of Cognitive, Linguistic, and Psychological Sciences at

Brown University contends that sleep is not an unproductive use of time and serves as an intensive process for the brain to consolidate learning. Research by her team suggests that brain reorganization may benefit from sleep due to increased energy availability or reduced distractions and new inputs. This is supported by the distinct roles played by two brainwave oscillations: Delta oscillations govern changes in the connectivity of the supplementary motor area (SMA) with other regions of the cortex, while fast-sigma oscillations relate to changes within the SMA itself. Although I do not fully comprehend what this means, I do accept that it means our brains are active and doing important things during sleep to restore and, perhaps, improve our functioning. Although lawyers cannot bill for sleepy time, it is central to effective representation not to discount it.

Physical activity is also critically important. In a study published in 2013 by Professor Christopher Bergland, researchers at Boston University School of Medicine found that specific hormones that increase during exercise correlate to memory enhancement. This impact on long-term memory is in addition to all the well-documented positive impacts of regular exercise on physical and mental health.

Downtime, “chilling” and relaxing are not only restorative but may promote brain health and cognitive endurance. Unfortunately with smartphones, lawyers are always on call, with clients and colleagues expecting immediate engagement to any communication. The reality is that efficiency often trumps rest because it is so easy to respond with an email or text during “idle” time such as that spent in traffic, waiting in line or when watching television. Many times, work tasks are more engaging than present company when we find ourselves not really wanting to be there. Confess silently; how many of you reading this reached for your smartphone because of an important, cannot-wait matter or simply because you were bored?

### **What to Do**

There is research indicating that our brains have the capacity to never stagnate, with perpetual learning being the norm as they are stimulated with new

information and knowledge. Novelty works wonders for improving brain health and cognitive endurance. Foster brain growth by continually challenging yourself with new activities, forcing your brain to learn and adapt. Cognitive development may also be improved by upping your game on existing interests by improving your skills until they plateau. Complex tasks promote mental well-being, provided you are still progressing to your personal best. Consistency and engagement are integral to improving cognitive functioning. Create a routine within your busy life that allows you to prioritize the new — and “unnecessary” — activity. Practice so that the learning sticks as the brain creates new neural pathways in its natural course of adaptation.

Taking classes, especially cultural, craft or art classes has positive effects. Structured learning with kind mentors is beneficial. Sparking creativity is helpful and should carry over into the problem-solving skills necessary to be an effective representative. Of course, if you perform poorly and become frustrated and lose self-confidence, stop and move onto something else. It is advisable to focus on only one new pursuit at a time. Remember, the goal is your own personal best and not a competition with others — even if it is a competitive activity.

The jury is still out on any long-term impact on mental stimulations from word/language, math and spatial puzzles, such as crosswords, Wordle, Sudoku and all the other wonders readily available on our smartphones. I love my daily Wordle, but not Spelling Bee or Connections since they are too hard and feel like work! The activity should be fun, refreshing and provide a sense of mental competence and satisfaction, not frequent failure. Professor Denise Park, the lead researcher in a 2013 study on aging, states: “Merely engaging in activities is insufficient; the key is to engage in unfamiliar and mentally challenging activities that offer comprehensive mental and social stimulation. When you remain within your comfort zone, you might miss out on opportunities for enhancement.”

Perhaps the Mount Everest of the climb for cognitive stamina is music. Neuroscientists have long known that musical practice enhances the functionality and

connectivity of various brain regions while also enhancing cognitive abilities. Playing a musical instrument may have profound effects, including gains in brain volume and strengthening communication between different brain regions. Musical training, especially in young children, can fundamentally transform how the brain perceives and integrates a variety of sensory information. My “deaf ears” precluded me from embarking on any musical path. When I was in elementary school, my uncle, Danny Conn, a legendary Western Pennsylvania jazz trumpeter, attempted to teach me to play the trumpet. Then other brass instruments. Then any instrument. We failed. “Bobby,” he said, “you just can’t blow — take up chess.” I did with modest success. But in some wistful moments alone, I envision me belting it out on the horn for all to hear.

### Takeaways

- Strive for personal best, not competition.
- It’s never too late to learn.
- Sharpen your saws.
- Sleep more.
- Think better.

### Notes

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