

## Brain Freeze or Breakthrough

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Picture what I witnessed during an evacuation drill... a woman decisively evacuating... *into a closet*. But why? Today we'll unpack the science of why people falter in emergencies – panic and cognitive overload – and how drills can help move past ineffective reactions.

The amygdala, our brain's fear alarm, alerts us to danger and reacts in an instant – milliseconds to be precise. Our bodies flood with Adrenaline and Cortisol to prepare us to act quickly. So why aren't humans super heroes at saving ourselves in emergencies? Well, this alarm response hijacks our prefrontal cortex which dictates logic. So we can act with speed, but it is instinctually driven speed instead of thoughtfully initiated. This is why one might flee, open the wrong door, and end up closeting themselves.

During my college career, a professor told me our working memory generally holds 5 – 9 ideas. Under stress, well it is more like 1 or 2 ideas. All of the stimuli in an emergency can overload our ability to process and we might not be able to discern between a closet and an exit. In fact, overload causes many people to freeze during emergencies, much like students who blank on a test.

As we move into Spring, it is likely we will experience more drills on campus. The reason for the drills is so that instinctually we already know what to do when an event notification occurs. We don't have to spend as much time processing what our options look like if we have already practiced. There is no universal standard for the exact number of times a person should go through a drill to become proficient, but science shows that repetition increases the odds of survival. Although drills may feel like an interruption to our day, they are short, and the time is well worth the effort.

Panic and overload, amygdala firing and cortex crashing are why we sometimes falter. We can outsmart the instincts that might cause one to freeze or make less than helpful decisions by practicing drills to avoid closet moments. You don't rise to the occasion; you fall to your level of training. Stay safe and drill often.

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