



Your favorite athlete closes in for a victorious win. The crowd holds its breath, and, at the crucial moment, she misses the shot. That competitor just experienced the phenomenon known as "choking," where despite months, even years, of practice, a person fails right when it matters most. Choking is common in sports, where performance often occurs under intense pressure and depends on key moments. And yet, performance anxiety also haunts public speakers, contestants in spelling bees, and even world-famous musicians. Most people intuitively blame it on their nerves, but why does being nervous undermine expert performance?

There are two sets of theories, which both say that primarily, choking under pressure boils down to focus. First, there are the distraction theories. These suggest that performance suffers when the mind is preoccupied with worries, doubts, or fears, instead of focusing its attention on performing

the task at hand. When relevant and irrelevant thoughts compete for the same attention, something has to give. The brain can only process so much information at once. Tasks that challenge working memory, the mental “scratch pad” we use to temporarily store phone numbers and grocery lists, are especially vulnerable to pressure.

In a 2004 study, a group of university students were asked to perform math problems, some easy, others more complex and memory-intensive. Half the students completed both problem types with nothing at stake, while the others completed them when calm and under pressure. While everyone did well on the easy problems, those who were stressed performed worse on the more difficult, memory-intensive tasks. Explicit monitoring theories make up the second group of explanations for choking under pressure. They’re concerned with how pressure can cause people to overanalyze the task at hand. Here, the logic goes that once a skill becomes automatic, thinking about its precise mechanics interferes with your ability to do it. Tasks we do unconsciously seem to be most vulnerable to this kind of choking.

A study on competitive golfers compared their performance when instructed to simply focus on putting as accurately as possible, versus when they were primed to be acutely aware of the mechanics of their putting stroke. Golfers usually perform this action subconsciously, so those who suddenly tuned in to the precise details of their own moves also became worse at making accurate shots.

Choking may not be inevitable for everyone though. Research suggests that some are more susceptible than others, especially those who are self-conscious, anxious, and afraid of being judged negatively by others.

How to Stay Calm Under Pressure

So, how can we avoid choking when it really counts? First, it helps to practice under stressful conditions. In a study on expert dart players, researchers found that those who hadn't practiced under stress performed worse when anxious, compared to those who had become accustomed to pressure. Secondly, many performers extol the virtues of a pre-performance routine, whether it's taking a few deep breaths, repeating a cue word, or doing a rhythmic sequence of movements. Studies on golfing, bowling, and water polo find that short rituals can lead to more consistent and accurate performance under pressure. And thirdly, researchers have shown that having an external focus on the ultimate goal works better than an internal focus, where someone is tuned into the mechanics of what they're doing. A study of experienced golfers revealed that those who hit chip shots while focused on the flight of the ball performed significantly better than those who focused on the motion of their arms.

So, perhaps we can modify that age-old saying: practice, under pressure, with focus, and with that glorious end goal in sight, makes perfect.