



By James E. Leemann, Ph.D.

Five o'clock fatigue

How a day of decisions drains mental energy

Three safety professionals are asked to evaluate their company's previous year's 129 incident investigation reports. Each separately makes a presentation to the vice president of safety, health and environment. The three presentations are made over the course of several days.

Safety Pro 1 (Presented at 8:30 AM): Proposed revising certain procedures relating to the most severe injuries and increasing management safety observations.

Safety Pro 2 (Presented at 3:00 PM): Proposed strong emphasis on safety from senior leadership down through directors and increasing the number of safety audits.

Safety Pro 3 (Presented at 4:30 PM): Proposed operational supervisors start conducting safety observations of their crews and eliminating safety requirements that did not make any sense in the current state of the organization.

Who gets the go-ahead?

So which safety pro do you think won approval to go forward with his approach?

According to Roy Baumeister, professor of psychology at Florida State University, and John Tierney, *New York Times* science columnist, the odds favor the VP green-lighting the safety pro who presented at 8:30 AM.

Why? Emerging research that Baumeister and Tierney explore in their new book *Willpower – Rediscovering the Greatest Human Strength*¹ is beginning to reveal that making decisions throughout the day wears us down mentally.

We are all familiar with physical and mental fatigue. Virtually none of us are aware of *decision fatigue* even though we experience it often ourselves or observe it in others practically every day.



Ask people if making decisions depletes their willpower and leaves them vulnerable to temptation, most people will say no.² But *decision fatigue* influences everyone every day, some to the point of career disasters.

Decisions drain mental energy

The more decisions you make during the day, the harder each one becomes, resulting in the sapping of your mental energy or willpower. As your willpower depletes, you are less inclined to make decisions.³ If your job involves a number of decisions to be made all day long, eventually mental energy will be depleted to the point that you will seek the path of least resistance. You'll either make bad or reckless decisions or opt to make no decisions.

Where does the power in willpower come from? Baumeister and Tierney explain the connection between glucose levels in our body and our ability to exer-

cise self-control. As glucose levels decline during the day, the power in our willpower declines also. The extreme of this low-blood sugar condition is found in diabetics.

Researchers have found diabetics tend to be more impulsive and have more explosive temperaments than other people their age. Diabetics are easily distracted when doing time-consuming tasks. Hence the reason diabetics must monitor their blood sugar closely in order to maintain their health and self-control.⁴

So when does decision fatigue set in?

Kathleen Vohs, a former colleague of Baumeister, conducted an experiment to demonstrate what psychologists call the "Crossing the Rubicon Model" involving a "predecisional phase" and "postdecisional phase."

Group one was asked to look at features of a computer, think about options and prices, advantages and disadvantages, form a preference, but not make a definite selection — the "Predecisional Phase."

Group two was given a list of computer specifications and told to configure a computer. They had to locate the specified features online and click the right one — the "Postdecisional Phase."

Group three was told to choose on their own the features they wanted on their customized computer. This group did more than ponder options or implement someone else's choices. They actually had to "cross the Rubicon" and make specific decisions to build their customized computer.

The experiment revealed that the third group's task was most fatiguing. When Vohs measured self-control, group three was far more depleted than the other groups.⁵

How does *decision fatigue* relate to safety?

Since we all suffer from *decision fatigue*, it would seem obvious that individuals who are involved in making safety decisions during their daily work routine might have a tendency to either make careless decisions, no decisions, or take the path of least resistance in the later afternoon hours or toward the last hours of their shift.

Retrieve the past 50 to 100 accident reports your organization has investigated and compare the time of the day the accident occurred to the severity of the injury(s). Did most of the accidents occur in the afternoon or during the closing hours of the employee's shift? Did the severity of the injury increase toward the end of the day or shift? It appears now that the employee could have been a victim of *decision fatigue*.

Fighting the fatigue factors

Here's how to counteract *decision fatigue*:

- ⌚ When scheduling complex mainte-

nance activities, consider beginning the work early in the morning or the shift rather than late in the afternoon or during the waning hours of a shift.

- ⌚ If you need a decision from your boss, don't schedule your conversation in the afternoon hours. Meet with your boss in the early to mid-morning hours.

- ⌚ Research has shown that monitoring your own behavior leads to a higher level of self-awareness, which in turn leads to greater self-control and stronger willpower. Traditionally, people have monitored their behavior in notebooks or on pieces of paper. Learn how to live by your own monitoring at websites such as: *RescueTime.com* (to improve your productivity), *Mint.com* (to improve the management of your money), and *Withings.com* (to track your body weight and blood pressure on your iPhone or Android device and automatically send it to your doctor).

We spend vast amounts of our time trying to change peoples' safety behavior. Maybe it is time to encourage our people to monitor their own behavior for those areas

they want to improve. Once they experience success, self-esteem will likely rise leading to personal reasons for wanting to work safely.

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1 Baumeister, R.F. and J. Tierney. 2011. *Willpower – Rediscovering the Greatest Human Strength*. Penguin Press, New York, NY.

2 Ibid. pp. 90.

3 Ibid. pp. 40 – 44.

4 Ibid. pp. 46.

5 Ibid. pp. 94.



Reprinted from *Industrial Safety & Hygiene News*
November 2011 ©2011 *Industrial Safety & Hygiene News*