

STUFF[®] By Arin N. Reeves

We are especially susceptible to relying on our biases when STUFF[®] happens.

Stress, Time Constraints, Uncertainty, Fatigue and Fear.

STUFF reduces our overall cognitive and critical thinking abilities thereby making it more likely that we revert to reactive and habitual patterns that block out new ideas and information. It makes us crave the comforts of our biases even more than we normally do.

Stress (Chronic stress)

Chronic stress measurably affects almost every aspect of our cognitive abilities from memory retention to analytical problem-solving skills to decision-making capacities. Chronic stress negatively impacts our cognitive abilities in specific ways:

- It blocks our ability to use our full range of taking in information, thereby creating a “tunnel vision” through which we fixate on certain information to the detriment of missing the larger picture.ⁱ
- It increases the likelihood that we will make decisions based on incomplete information.ⁱⁱ
- It increases the likelihood that we will use heuristics and other cognitive shortcuts instead of fully thinking through what is in front of us.ⁱⁱⁱ
- It increases the probability that we will use habits instead of analysis to make our next decision.^{iv}
- It decreases our abilities to manipulate information, analyze complex situations, and solve problems.^v
- It decreases overall accuracy in task completion and increases overall amount of time necessary to complete the task.^{vi}

If I could do just one thing today to make it better, what would it be?

Stress is the difference between expectations and reality so decide whether it is easier for you to shift your expectations or your reality.

Time Constraints

As a subset of stress, time constraints can lead to many of the decreases in cognitive abilities that general stress does, but when time constraints become really tight, people rely even more heavily on heuristics that lead to biases.^{vii} When we operate under the stress of time constraints, we are more likely to engage in stereotyping (especially racial/ethnic stereotyping) and anchoring (in ways that reinforce in-groups and out-groups).^{viii} Time constraints push us into instinctive thinking that is automatic, implicit, heuristic, and biased without our awareness.

If I could do just one thing today to make it better, what would it be?

Focus on the next thing that you have to do. That's it. There is always time to do the very next thing.

Uncertainty

Human beings do not like uncertainty. So, when we are faced with uncertainty, we play mind games to reduce (or even erase) the uncertainty in order to make ourselves think that we have the information we need to make logical decisions when we really don't.^{ix} We tell ourselves that we know things we really don't know in order to manufacture certainty, and we default to a “preference fluency” that draws us into what is familiar when faced with uncertainty.

If I could do just one thing today to make it better, what would it be?

Identify if what you are dealing with is risk (known probabilities) or uncertainty (unknown probabilities). Risk requires a calculated decision. Uncertainty requires a leap of faith, and leaps of faith cannot be proven or market-tested so don't bother trying.

STUFF[©] By Arin N. Reeves

Fatigue

None of us needs a study to tell us that when we are tired, we don't think as clearly or as sharply. That said, there are researchers who have investigated the specifics of how our cognitive skills (such as reaction time, concentration, and memory^x) are affected when we are fatigued, and analysis has shown that eight cognitive functions are specifically impacted when we are tired:

- appreciating a complex situation while avoiding distraction
- keeping track of events and developing and updating strategies
- thinking laterally and being innovative
- assessing risk and anticipating range of consequences
- controlling mood and uninhibited behavior
- showing insight into own performance
- remembering “when” rather than “what”
- communicating effectively

For example, a study conducted on the cognitive and physical motor skills of surgical residents before and after their calls found that fatigue after a call caused a significant deterioration in the surgical residents' cognitive and physical motor skills.^{xii} Not only is our ability to pay attention decreased when we are fatigued,^{xiii} but our perception of how we are performing and solving problems gets greatly compromised.^{xiv}

If I could do just one thing today to make it better, what would it be?

Sleep. Seriously, take a nap. There's plenty of research that now shows that short naps, long naps, vacations, and so on allow us to think better.

Fear

Fear plays a predictable role in our conscious actions; we are less likely to do things when we are afraid, but the conscious predictability of what we may or may not do pales in comparison to what fear does to us unconsciously. For instance, when two groups—one group of people who were afraid of heights and another group who were not afraid of heights—were asked to estimate the distance from the ground to a second floor balcony, the acrophobic group far overestimated the height of the balcony in comparison to the other group.^{xv} We perceive the objects of our fear in exaggerated ways, and the exaggerated vision of what we fear makes us even more afraid.

Recent research reveals that “individuals from a racial group other than their own are more readily associated with an aversive stimulus [fear] than individuals for one's own race, among both white and black Americans.”^{xvi} This fear of “the other” manifests in an implicit fear that translates into affective, physiological, cognitive, perceptible, and behavioral responses just as a fear of heights does.

In addition to the fear of “the other,” people fear change and the unknown.^{xvii} Status quo and familiarity biases are consistent with fear of change. Fear of the unknown keeps people rooted to what they know even if what they know is no longer what they want.

If I could do just one thing today to make it better, what would it be?

Accept your fear as the very conservative companion on your journey that you have to listen to every once in a while.

- ⁱ Staw, Barry M. L. E. (1981). Threat-Rigidity Effects on Organizational Behavior. *Administrative Science Quarterly*, 26(4), 501-524. Mann, I. L. (1977). *Decision Making: A Psychological Analysis of Conflict, Choice, and Commitment*. New York: Free Press.
- ⁱⁱ Ibid.
- ⁱⁱⁱ Shaham, Y. K., & Singer, J. E. (1992). Stability/Instability of Cognitive Strategies across Tasks Determine Whether Stress Will Affect Judgmental Processes. *Journal of Applied Social Psychology*, 22(9), 691-713.
- ^{iv} Schmidt, M. V. (2011). Splintered by Stress. *Scientific American Mind*, 22-29.
- ^v Larsen, J. T.; McGraw, P. & Cacioppo, J. T. (2001). Can People Feel Happy and Sad at the Same Time? *Journal of Personality and Social Psychology*, 684-696. Ito, T. A.; Larsen, J. & Smith, N. (1998). Negative Information Weighs More Heavily on the Brain: The Negativity Bias in Evaluative Categorizations. *Journal of Personality and Social Psychology*, 887-900.
- ^{vi} Idzikowski, C. a. (1983). Fear and Performance in Dangerous Environments. *Stress and Fatigue*, 123-144.
- ^{vii} Hogarth, R. M. (1987). *Judgment and Choice: The Psychology of Decision*. New York: John Wiley.
- ^{viii} Kruglanski, A. W.; Shah, J. Y.; Fishbach, A.; Friedman, R.; Chun, W. Y. & Sleeth-Keppler, D. (2002). A Theory of Goal Systems. *Advances in Experimental Social Psychology*, 331-378.
- ^{ix} Buchanan, J. A. (2000). Information Overload: A Decision Making Perspective. *Proceedings of the 15th International Conference on Multiple Criteria Decision Making* (pp. 49-58). Ankara, Turkey: Springer Verlag, Berlin, Germany.
- ^x Harrison, Y. a. (1997). Sleep Deprivation Affects Speech. *Journal of Sleep Research and Sleep Medicine*, 871-877. Harrison, Y. a. (1998). Sleep Loss Impairs Short and Novel Language Tasks Having a Prefrontal Focus. *Journal of Sleep Research*, 95-100. Harrison, Y. a. (1999). One Night of Sleep Loss Impairs Innovative Thinking and Flexible Decision Making. *Organizational Behavior and Human Decision Processes*, 128-145. Horne, J. A. (1988). Sleep Loss and 'Divergent' Thinking Ability. *Sleep: Journal of Sleep Research & Sleep Medicine*, 528-536.
- ^{xi} Petrilli, R. M., Lamond, N., & Roach, G. a. (2002). Identifying the Cognitive Skills That Are Most Affected by Fatigue within a Decision-Making Framework. In I. Susila, *Kumpulan Makalah Ergonomi* (pp. 548-556). Denpasar, Bali: Udayana University Press.
- ^{xii} Kahol, K., Leyba, M., Deka, M., & al., e. (2007). Effect of Fatigue of Psychomotor and Cognitive Skills. *American Journal of Surgery*, (pp. 194-205). Washington, DC.
- ^{xiii} Davies, D., & Tune, G. (1970). *Human Vigilance Performance*. London: Staples Press.
- ^{xiv} Staw, S. a. (n.d.). Threat-Rigidity Effects on Organizational Behavior.
- ^{xv} Clerk, E., Cody, M., Stefanucci, J., & Proffitt, D. a. (2009). Imagery and Fear Influence Height Perception. *Journal of Anxiety Disorders*, 381-386.
- ^{xvi} Ollsson, A., Ebert, J., & Mahzarin, B. a. (2005). The Role of Social Groups in the Persistence of Learned Fear. *Science*, 309(5735), 785-787.
- ^{xvii} Cao, H. H. (2007). Fear of the Unknown: Familiarity and Economic Decisions. Available at SSRN: <http://ssrn.com/abstract=985381> or <http://dx.doi.org/10.2139/ssrn.985381>.