



Recently, I participated in a volunteer project that presented various logistical and technical challenges for the group. We were tasked with helping contractors install a solar array and associated equipment. The worksite was in a remote location, staffed by volunteers, and all materials and tools would be sourced on-site. Having worked in construction my whole life, I felt like I was prepared for anything that may pop up during the project and as a safety professional, I felt I was well equipped to anticipate, identify, and resolve any problems we might encounter. First, let me say that the project volunteers were awesome! They were safety minded and motivated to complete the work without incident. In fact, the entire project was a success. No one was injured and the solar equipment was installed properly and safely. However, it didn't come easy.

As a group, we tried to identify the safety requirements and materials and tools needed well in advance of the trip. We provided a list of clothing and PPE requirements, logistical information, and discussed the types of hazards the group may encounter. Once we were on-site, we conducted a safety briefing with everyone involved. We addressed qualified vs. unqualified work, we discussed PPE requirements, and we discussed the personally responsibility that each of us has to manage our own risk while simultaneously looking at for others. We had a truck load of water, sunscreen, tools and PPE items, all that was left was the getting the materials. Shortly after discussing the work plan, a large delivery truck made its way down the alley. The truck had everything we needed for the install, or did it?

The way safety is managed has changed over the years. We used to rely solely on command and control - follow the rules! Complying with rules is important but as one of my old supervisors used to say – “following the rules is the cost of admission”. In other words, compliance is the baseline, the minimum requirement. Thanks to the nuclear, airline, and healthcare industry, we now understand that managing risk is where the real work is. Understanding how human beings think, how they behave, and most importantly how they respond. These things are not always conscious thoughts or actions. Mostly, these responses are formulated in the brain without you being aware. Human Performance teaches us that humans are fallible, the brain takes short cuts, and assumptions are made whether you know it or not. This human element is why many incident investigators will identify the worker as the problem. Unfortunately, this is the easy way out and will do little to prevent recurrence. It's true that occasionally a worker will recklessly perform an unsafe act knowing full well what the outcome could be, but most worker related incidents are a result of human error or the result of drifting away from established procedures resulting in a high-risk tolerance. Human error and risk tolerance begins in the brain. In fact, the study of human performance and the way the brain functions help us to identify the inherent bias in how our brain takes in and responds to information and stress. During the volunteer project, I was reminded how availability bias works and how it can manifest itself on the worksite.

Availability Bias can be defined a couple of ways:

- The human tendency to rely on information that comes readily to mind when evaluating situations or making decisions.
- The human tendency to use what's readily available, even if its not the best option.



In construction, workers are faced with availability bias often. I don't have a hammer, so I'll use the adjustable wrench. I don't have a straight ladder, so I'll use the a-frame ladder. I don't have the proper dust mask, so I'll wrap a wet cloth around my face, etc.

Now back to the volunteer project and why it triggered my thoughts on availability bias and how employers have a role to play in combatting the at-risk behaviors that accompany it. As I mentioned, the truck was supposed to have all the parts, but it didn't. We made many trips to the local big box store for additional materials, PPE, water, ice, tools, and on and on. An exhausting number of trips resulting in wasted time, taking experts of the site, and most importantly raising the stress level. We collectively did a great job of installing a quality product and everyone was actively managing their safety. What really made me think is how important it is for supervisors to acknowledge this risk and how to talk with their workers about managing it through discipline and communication.

In closing, take time to learn about the inherent bias that our brains have, understand the limitations and temptations that affect the success of a job, and most importantly, the techniques that help us to overcome these biases.

Thank you,

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