**Safety Corner**

**What are the negative effects of cognitive bias on safety decisions?**

Most safety management theories assume safety managers and workers make rational decisions, follow safety rules and behave safely at the workplace. However, people may make illogical judgment due to tendencies to think in certain ways. Such systematic deviations from a standard of rationality or good judgment are known as cognitive bias.

While any single decision may be insignificant by itself, a series of small biased decisions within an organisation can create a negative safety culture or path to disaster. Below is a list of common cognitive biases that can adversely affect safety and organisational culture:

- Confirmation bias – Seek out only the information that supports and confirms one's preconceptions, and to discounting or ignoring that which does not
- Framing effect – draw different conclusions from the same information, depending on how or by whom that information is presented, often beyond the factual content
- Normalcy bias – refuse to plan for, or react to, a disaster which has never happened before
- Reactance bias – urge to do the opposite of what someone wants one to do out of a need to resist a perceived attempt to constrain one's freedom of choice
- Recency bias – pay more attention to data that are easily available or most recent
- Risk compensation – take greater risks when perceived safety increases
- Self-serving bias – claim more responsibility for successes than failures, or evaluate ambiguous information in a way beneficial to their interests
- Sunk-cost bias – make choices that support past decisions in which one has invested resources, even though current data indicate the course of action is not optimal
- Wishful thinking – overestimate the success probability of a preferred option

While understanding cognitive bias may not change every decision, knowledge of the negative effects can provide a strong incentive for management to engage in open communication, to share knowledge and lessons learnt in fostering a safety-first culture.

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*The Safety Corner is contributed by Ir Dr Vincent Ho, who can be contacted at vsho@UCLA.edu*