Leaders seeking to achieve fast results through an incident investigation may overlook key motivators or competing interests affecting behaviors that drive workers to take risk. Often, the incident investigation effort is cursory and born out of a compliance necessity rather than for the learning and prevention experience, which is akin to checking the box and moving to the next priority. Workers themselves may not be cognizant of their behaviors and choices that lead to injuries and loss.

Individuals rationalizing whether to take a risk suggests that there is an understood level of adverse consequence as a possible outcome of their actions. This is a broad statement and an overgeneralization of the complexity of thought processes and actions that take place in a matter of seconds. Budgett, O’Carroll and Pfannkuch (2015) comment that “As a concept, risk can refer to a probability or to a consequence or to the product of probability and consequence” (p. 331). Probability enters as a decision-making mediator of a potential outcome and becomes a measure of the risk frequency and severity as to whether one will act knowing the possibility and extent of harm.

Forethought may not be as ever-present as one might assume because many of our decisions are reflectively and emotionally made at a subconscious level. This article explores how emotions serve as a factor in why people take risks and how emotions may motivate actions that may lead to harm, specifically as it relates to the work environment.

Emotions Influence Risk-Taking Behavior
Risk-taking behavior is influenced by emotions. As we perceive the world around us, we take in data from various input stimuli, then interactively process the information received. This intake of information occurs at lightning speed and with little or no forethought to actual consequences. These inputs, in turn, elicit an emotional response from which we interactively contemplate, make decisions and act. These interactions are based on how we make sense of the information received, process it at an emotional level, and react or behave. According to a study conducted by Kausel (2017) subjects were tested to determine how emotions influenced behaviors and how conclusions were drawn by test subjects.

Recent models of the interpersonal effects of emotions, such as the Emotions as Social Information...
The researchers concluded their study showed that “people have lay beliefs that emotions such as fear are linked to risk-taking” (Kausel, 2017, p. 9). This strongly suggests that emotions influence choice. One could then reason that the effects of poor morale are derived from poor leadership and are inevitably linked to outcomes of poor safety performance and risk-taking. For example, workers are usually acutely aware of their supervisor’s perceived attitude to determine what kind of a day they might encounter. If the supervisor’s mood on any given day is perceived to be angry, workers will respond by keeping to themselves and only bring up matters when necessary, thus avoiding possible conflicts. Workers themselves react to the perceived emotions (real or otherwise), process the inputs, and act or don’t act in response to the state of affairs.

According to Damasio (1996), under certain circumstances, emotions can disrupt reasoning:

There has never been any doubt that, under certain circumstances, emotion disrupts reasoning. The evidence is abundant and constitutes the source for the sound advice with which we have been brought up. Keep a cool head, hold emotions at bay! Do not let your passions interfere with your judgment. As a result, we usually conceive of emotion as a supernumerary mental faculty, an unsolicited, nature-ordained accompaniment to our rational thinking. (p. 52)

The difference between choices based on emotion and a sense of duty provides two opposing concepts. Emotions act upon us at a base level of understanding, whereas many would just assume that obligations, duties and rules drive behavior. Workers often observe the world through a knowledge of right because there are laws or some rule dictating how the world ought to function within certain contexts. If individuals have all made sense of a given situation, in the same manner, the behavior can be expected to function consistently. Unfortunately, the number of variable inputs is too great to contemplate.

Workers respond emotionally to the demeanor and actions of leaders. Perhaps you or a coworker has asked, “What kind of a mood is the boss in today?” This question is motivated by a need to understand how to respond or interact with the boss and to avoid conflict. According to Schoo (2008), positive leadership is known to produce happier workers, which, in turn, results in better workforce outcomes. The emotional state we experience drives us to act in particular ways either to please or to avoid conflict. Positive leaders who are attuned to worker emotions can actually incent workers through their mature and genuine conduct. When workers are stressed emotionally, an innate sense of survival may act as the motivating factors. According to Schoo, “Therefore, in fulfilling higher needs, people’s behaviors may be more relaxed, flexible and effective, and work environments are likely to be more pleasant than in situations where people have to struggle to fulfill their external necessities to live” (p. 52).

Risk Perceptions & Human Error

Employees committing unsafe acts as the leading cause of injuries is a premise that has been held for some time, first posed by H.W. Heinrich in 1931. According to Manuele (2011), “Heinrich professes that among the direct and proximate causes of industrial accidents, 88% are unsafe acts of persons; 10% are unsafe mechanical or physical conditions; 2% are unpreventable (H-5)” (p. 54). Manuele is careful to note that Heinrich’s writings are the foundation of many safety-related training practices. However, he indicates that Heinrich’s view of causation should be revisited as “an analytical evidence indicates that these premises are not soundly based, supportable or valid, and, therefore, must be dislodged” (p. 52). This is due to the absence of Heinrich’s research documentation, which cannot be found. Dislodging a long-held premise is easier said than done, but necessary to remove blame and encourage dialogue to prevent recurrence. The view of unsafe acts of persons as the primary cause of incidents will likely serve to instill fear in workers, thereby driving the problems underground and leaving incidents unreported and unresolved.

Heinrich’s view presupposes the fault of the person or that human error is the first and proximate cause of incidents. Manuele (2011) comments on Heinrich’s view of human error: “That concept permeates Heinrich’s work. It does not encompass what has been learned subsequently about the complexity of accident causation or that other causal factors may be more significant than the first proximate cause” (p. 54). It is difficult to conceive of a single causation for any incident given the number of variables and complexity in play at any one moment.

Context & Sensemaking Matter

Work is often a balancing act of priorities. The priorities of others often conflict with our own desires, perceptions of need
and goals. Competing interests change the context of what we perceive as important. How we behave is contextually based on many variable inputs including our upbringing, values, aspiration, desires to seek pleasure or shun pain, knowledge of a given situation, and the very moment and inputs of a given situation. Context sets the stage for internal debate and ultimately a choice. Vlaev (2018) states, “When presented with a context, a person has to construct relevant preferences and beliefs, and will create and evaluate arguments in order to do so” (p. 2). The contextual immediacy of our situation influences behavioral choice and related outcomes. Vlaev argues that “rationality assumptions typically hold locally—i.e., within a context, but not globally across contexts” (p. 4).

**Case Study**

Toward the end of an evening shift, a work crew experienced a jam up of materials in the manufacturing equipment they were operating. Operators were desperate to keep production running to avoid disciplinary action and additional hours of overtime. The crew began cleaning the machine with solvent to speed up the work. Materials became saturated with the flammable solvent and were permitted to enter into a drying oven. At approximately 2:30 a.m., the crew observed a series of two explosions in the dryer. When observing the emotional state of the workers, a few relevant facts became apparent:

**Emotions**

- Workers were frustrated because the machinery jam was going to cause them to work overtime on an already-late night shift.
- The plant had demanding production goals laid out by management causing additional pressures to meet demands.
- Workers could not leave their workstations for breaks and therefore were observed eating around the equipment to ensure that demands were met.

**Outcome**

- Operators deviated from known safe cleaning procedures by applying a combustible solvent to materials feeding through the machinery and into an open flame dryer.
- Oxygen and the solvent were introduced into an open flame dryer, which resulted in a series of explosions.

Relevant inputs and internal discussions form how we observe the world around us to promote internal sensemaking. The term *sensemaking* itself is straightforward in that it simply means “the making of sense” (Weick, 1995). Dougherty and Drumheller (2006) reflect on the work of Karl Weick and indicate how sensemaking is a continual series of reflections and projections toward a future state.

Sensemaking is also prospective in that sense that is made retrospectively affects future sensemaking (Weick, 1995, 2001). By recognizing sensemaking as both retrospective and prospective, sensemaking as a process is also emphasized. Specifically, sensemaking is ongoing in duration, having no single point of departure and no permanent point of arrival. (p. 217)

Weick (1995) notes that emotions play a part in both the commencement and outcome of sensemaking:

The reality of flows becomes most apparent when that flow is interrupted. An interruption to a flow typically induces an emotional response, which then paves the way for emotion to influence sensemaking. It is precisely because ongoing flows are subject to interruption that sensemaking is infused with feeling. (p. 45)

**Social Construction**

Comprehending how or why a choice is made requires some level of dialogue. Dialogue provides the link between what we understand as real and the communities to which we belong, and as Berger and Luckman (1966) simply put it, “We understand our lives as stories.” Last, Gergen (2009) provides the following four observations regarding constructionist viewpoints:

1) What we take to be an experience of the world does not in itself dictate the terms by which the world is understood. What we take to be knowledge of the world is not a product of induction, or of the building and testing of general hypotheses.

2) The terms in which the world is understood are social artifacts, products of historically situated interchanges among people. From the constructionist position, the process of understanding is not automatically driven by the forces of nature but is the result of an active, cooperative enterprise of persons in relationship.

3) The degree to which a given form of understanding prevails or is sustained across time is not fundamentally dependent on the empirical validity of the perspective in question but on the vicissitudes of social processes (e.g., communication, negotiation, conflict, rhetoric).

4) Forms of negotiated understanding are of critical significance in social life, as they are integrally connected with many other activities in which people engage. Descriptions and explanations of the world themselves constitute forms of social action. As such they are intertwined with the full range of other human activities.

The central theme of social construction revolves around the social processes that are in play during our attempt to conceptualize the world to attain knowledge. The theory of social construction relates to the interactions of individuals to form shared mental representations or reciprocal inputs that create knowledge and ultimately contextual meaning. “The most important experience of others takes place in the face-to-face situation, which is the prototypical case of social interaction. All other cases are derivatives” (Berger & Luckman, 1966, p. 28).

**Emotional Triggers (Somatic Markers)**

Is it a matter of choice if we are so compelled by external influences at an emotional level to act? Triggers or sparks to our emotions bias our decisions as feelings in the body such as anxiety or fear, eye-dilation, increased heart rate, nausea or repulsion. Damasio (1996) argues that emotional processes act upon how we process and behave with certain stimuli: “In short, somatic markers are a special instance of feelings generated from secondary emotions. Those emotions and feelings have been connected, by learning, to predicted future outcomes of certain scenarios” (p. 174). Emotional triggers, therefore, function to alert or incent people to action “when a negative somatic marker (emotional trigger) is juxtaposed to a particular future outcome the combination functions as an alarm bell. When a positive somatic marker is juxtaposed instead, it becomes a beacon of incentive” (Damasio, 1996, p. 174).

In some respects, an emotional trigger operates subconsciously as mental cues that help us choose options with the evidence in hand in a rapid form of data review. “Somatic markers do not deliberate for us. They assist the deliberation by highlighting some.
options (either dangerous or favorable) and eliminating them rapidly from subsequent consideration” (Damasio, 1996, p. 174).

For example, let’s say you are leaving home to drive to work in the Midwest during a change of seasons between winter and spring. The weather has been bright and sunny for the past week, but on this day it has shifted to a cold snap. You observe considerable cloudiness and feel the sharpness of the cold air on your face. Rain and sleet are in the forecast for that day. You begin your commute and then observe the rain and sleet begin to fall. As a result, you slow down your vehicle and allow extra room between you and the car ahead to permit adequate braking. The inputs provided at both subconscious and conscious levels cause you to use this information to alert you to possible problems and benefits. The deliberation does not paralyze your thought process but rapidly helps you choose a safer course of driving to avoid a crash.

Emotional triggers act to shorten our ability to choose a given path. Negative emotional triggers function as deterrents, whereas positive somatic markers demonstrate possible benefits.

**Empathy & Emotions**

Empathy is the capacity to understand and share the feelings of others. Empathy also provides a level of self-reflection to help keep our emotions in check. Empathy is important because it helps us appreciate how coworkers and subordinates are reacting emotionally so we can respond appropriately within the context of a given situation. For example, a truck driver needs to control his/her emotions when operating an over-the-road vehicle to avoid causing a crash. Having the capacity to understand, share the feelings of others and self-regulate is a sign of emotional intelligence and positive emotions.

Positive emotions may be associated with one’s developmental and capability of forgoing the immediacy of pleasure from consuming unhealthy foods, drink or substances. Therefore, it is important to advance our understanding of how a lack of positive emotions may lead to risky behavior, particularly among individuals for whom this risky behavior often becomes most problematic (e.g., individuals at risk for or with a clinical diagnosis; Devlin, Johnson & Gruber, 2015).

**Emotional Intelligence & Choice Theory**

Emotional intelligence is the ability to work with and reconcile the competing interests of your own needs and the needs of others. As noted, interactions with the environment are formed at an emotional attachment to prior experiences and related outcomes, both positive and negative. Suppressing one’s own interests for the benefit of others is an expressed level of developmental maturity. Forgoing the immediacy of pleasure in the interest of a long-term benefit is just such an example. For example, a worker may have some big event that s/he would like to attend after work. This forms a competing interest against work priorities to maintain quality, production and timeliness. As such, the worker knows that completing work as prescribed will take a certain amount of time to achieve espoused goals. Should any deviation occur that precludes work from progressing, this may interrupt being able to attend to the outside activity.

**Case Study**

A small work crew showed up to a work site to conduct welding repairs. The 440 V electrical source was inoperable. A crew member observed two cut wires hanging from the bottom of a junction box. As it was Friday afternoon the crew decided they lacked the ability to make repairs and took off for the weekend. Come Monday morning the crew reported to the work site and realized they had forgotten to call an electrician to repair the junction box. Missing another day of work would affect their pay. A crew member thought he could fix the problem by using a stick to push the wires back into the box. The supervisor approved and stood by to watch. An arc flash occurred injuring both the worker and his supervisor.

**Emotions**

- Workers with the promise of an extended weekend left the jobsite after finding the faulty wiring on a Friday afternoon. No one called a qualified electrician as specified by the company guidelines.
- Returning to complete the work on Monday, the wiring was still found inoperable.
- Missing more time from work would mean less take-home pay for the week.

**Outcome**

- Workers did not want to lose any more time/pay and attempted to fix the electrical panel even though they were unqualified.
- Pushing the wires caused an arc flash injuring the worker and supervisor.

The worker with a mature level of emotional intelligence may not like being interrupted, but will recognize the need to fulfill the work obligations as prescribed, whereas a worker without that maturity level may be distracted at an emotional level to take shortcuts to ensure that s/he will get out on time regardless of the impact on quality, safety and production outcomes, setting the stage for deviating from known safe work practices. In this case the supervisor did nothing to discourage the worker
from conducting a task well outside of his capabilities. As such, we are motivated by the emotions and competing interests that drive us to choose unsafe actions.

Choice theory presents that concept of accounting for our own actions regardless of the external influences. Glasser (1996) notes the fallibility associated with an old common-sense psychology called stimulus-response, which is the notion that individuals are responsive to external stimuli and therefore not responsible for their actions. In contrast, Glasser notes that “choice theory teaches that the only behavior we can control is our own” (p. 20). Glasser indicates the theory teaches we are driven by four psychological needs:

1. belonging: being around other people and feeling accepted by them;
2. freedom: being able to use creative and problem-solving skills to make choices;
3. power: implementing the decisions we make or manipulating our environment to achieve goals;
4. fun: learning something motivating or interesting.

Leaders, therefore, need to recognize and help workers fulfill these four needs to facilitate success and satisfaction in their working lives.

How to Prevent Risk-Taking Behavior

Work as imagined is set in motion by organization leaders to produce safe outcomes by design. How work is interpreted to take place is often based on how and what management communicates verbally, in writing and through actions. Workers read these emotional signals from leaders and form opinions as to how work should proceed. Workers often believe the shortcuts they take are with good intention to be more productive members of the workforce, which brings us to the three steps needed to help prevent worker risk-taking behavior (Figure 1, p. 49).

1) Evaluate work as imagined compared to reality. As a matter of course, organization leaders should develop methods of evaluation to judge how closely the implementation of actual work practices match to how they were designed through a candidate, open dialogue with workers completing the work.

2) Remove competing interests. Workers respond to the emotional signals leaders provide. Leaders may verbally espouse one set of priorities while unwittingly communicating another. One operation told workers to work safely but to also rush production. Competing interests distract workers from behaving as imagined. Do not let times get desperate.

3) Streamline complex processes. Quality processes should also be applied to OSH initiatives. Strive for consistency of implementation and question workers closest to the work for the best ways work should be accomplished. Promote feedback loops with workers when they bring ideas forward. Empower workers to stop work in unsafe scenarios supported by leaders’ consistent emotions and signals.

Conclusion

The reason individuals place themselves or others in harm’s way may not be readily apparent, but, as discussed, we can see that acting contrary to known safe work practices may not be a failure of judgment on the part of the worker. Rather, through a series of internalized perceptions at the conscious and subconscious level, workers are reacting to emotional inputs and the context of the present situation. Workers are motivated to continually adapt to changing conditions as a coping mechanism driven by self-interests and the competing interests of others.

Mature leaders empower employees to become successful by helping them fulfill the basic needs to belong, have the freedom to choose, the power to implement to achieve goals and, in the end, have fun through interesting and stimulating work.

Understanding the competing interests in play is the starting point of comprehending why workers act contrary to known safe work practices at an emotional level. Therefore, leaders must recognize and help workers through these emotional states. The only choice we can control is our own by recognizing competing interests that can be detrimental to the organization. Organizational leaders are encouraged to evaluate work as imagined compared to reality, remove competing interests and streamline complex processes.

References


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