

"We are conscious of only about 5% of our cognitive activity, so most of our decisions, actions, emotions and behavior depends on the 95% of brain activity that goes beyond our conscious awareness."

- Marianne Szegedy-Maszak Mysteries of the Mind

"Most of what we do
every minute of every day
is unconscious.
Life would be chaos if everything
were on the forefront
of our consciousness."

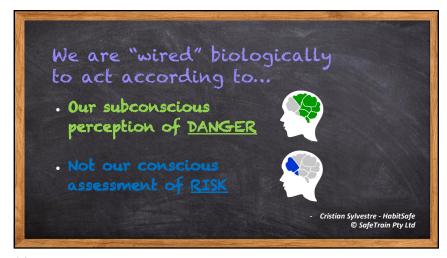
Paul Whelan
University of Wisconsin
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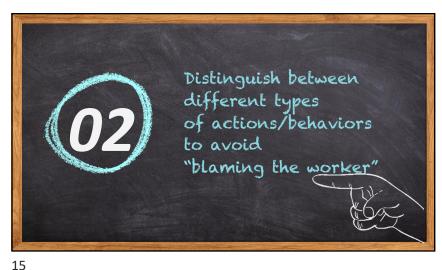
Conscious vs. Subconscious Mind

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- Subconscious mind controls life functions like breathing, heart function and digestion, but also memory, feelings, emotions, beliefs, attitudes, gut instincts and habits
- Conscious mind controls logical and intellectual processes like decision making, planning, strategy, communication and language

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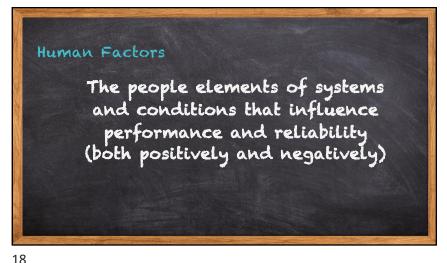


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"When we do a five-why investigation, if we get down to the human factors that are involved in the incident, it's usually to place blame on someone." — Anonymous Client's Supervisor Examining Human Factors Should Not Be a Fault-Finding Exercise! . We need to develop some new "whys"! Asking these questions may help us realize there are reasons beyond deliberate, conscious at risk actions

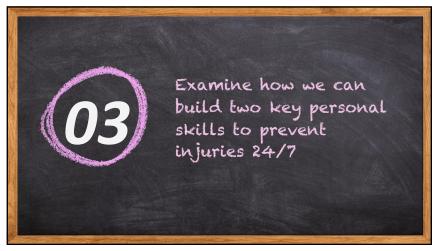
Human Factor Why Questions

- Why would someone deviate from their normal behavior?
- Why would someone take actions that put themselves at higher risk?
- Why would someone who has been empowered to make a safety decision (ex - stop work authority) avoid doing so?

Human Factor Why Questions

- Why would someone not ask for help or clarification if uncertain about how to do a task safely?
- . Why would someone not share an idea that could make work easier or safer?
- Why would someone operate unsafe equipment?

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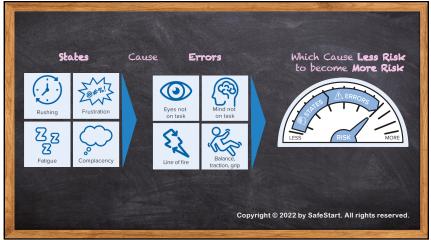


We Need to Provide Portable Tools for 24/7 Safety in Both the Conscious and Subconscious Mind

 Learning to recognize in the moment when we are likely to be at higher risk due to human factors

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Which of These Human Factors Are Affecting Your Organization the Most? · Rushing . Distractions · Frustration . Illness · Overconfidence · Fatique · Complacency · Happiness · Feeling Overwhelmed · Experience · Financial Stress · Competence · Sadness · Empathy · Anticipation/Forecasting · Mindfulness · Non-work/Personal Issues · Assumption

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Which of the First Three States Causes
You the Most Issues Personally?

Rushing
Frustration
Fatigue
Fatigue
Complacency
State is elevated?
Can you recognize
(self-trigger) on these signs before an error occurs?

"The brain networks associated with self-control
(e.g. the prefrontal cortex)
are the first to go "offline"
when faced with triggers such as stress."

- Judson Brewer, MD, PhD
Psychology Today

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We Need to Provide Portable Tools for 24/7 Safety in Both the Conscious and Subconscious Mind

- Learning to recognize in the moment when we are likely to be at higher risk due to human factors
- · Utilizing solid habit formation skills

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Truths About Habits (and a Big Myth)

- You may have heard the saying, "If you do something 21 days in a row, it becomes a habit."
- Likely originated from the book Psycho
 Cybernetics by Maxwell Maltz where he states
 it takes 21 days to effect perceptible change
 in a mental image

"Depending on the person and the habit, the average number for behavior to become automatic averaged 66 days.

The spectrum ranged from 18 days to 254 days!"

— University College of London research

Truths About Habits (and a Big Myth)

· We are creatures of habit

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. Let's prove this with a simple exercise

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"Habits are efficient:
People can perform useful behaviors
without wasting time and energy
deliberating about what to do."

- Psychology Today

Truths About Habits (and a Big Myth)

• The process of developing habits involves practicing very deliberate actions in order to seat them in our subconscious mind by developing what neuroscientists call "preferred neural pathways".

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Truths About Habits (and a Big Myth)

In laymen's terms, our subconscious mind causes us to default to a safe behavior/action even when our conscious mind is otherwise occupied.

Three Main Steps in Habit Formation

Cue - the trigger to remind you to practice the new habit.

Routine - adapt your routine to match the desired outcome or habit.

Reward - when you have practiced this new habit a number of times, then celebrate by rewarding yourself!

- Charles Duhigg
The Power of Habit

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"How rewarding a behavior is drives the likelihood of repeating that behavior in the future."

- Judson Grewer, MD, PhD Psychology Today

"To have a role in habit formation, rewards have to be bigger and better than what you would normally experience."

- Wendy Wood Good Habits, Bad Habits

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"In the brain, unexpected rewards spur the release of dopamine, stamping the details of the rewarding experience into memory, and making it more likely you'll repeat the behavior."

Good Habits, Bad Habits

Let's Talk About Practice

. "Practice makes perfect" is a myth

. Practice makes permanence

. You have to be intentional about practice

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Five Do's for Creating New Habits 1. Start small (ex. walk 5 mins vs. walk 5 miles) 2. Change your view (ex. walk one mile or 15 mins?) 3. Make it easy (set yourself up for a win!) 4. Focus on the reward (visualize why it's important) 5. Plan to fail (you're going to have set-backs)

Three Don'ts for Creating New Habits

1. Don't put off starting! (procrastinating until tomorrow is way too easy)

2. Don't give up! (results don't always come quickly and you will have set-backs)

3. Don't keep it to yourself. (share what you're working on with others to inspire them and allow them to keep you accountable)

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