Challenging Assumptions Behind Health & Safety Thinking

MICHAEL R FEARS

BA, MA, ABD PHD, CRSP

SENIOR MANAGER, COMPLIANCE & HSEMS

CIMA CANADA INC.

21st Alberta Health & Safety Conference

Edmonton Alberta, Feltham Centre (CAT), NAIT

Dow Theatre, 0900-1000 hrs

Thursday, 02 May 2024

Summary

- Setting the Stage
- Assumptions, Myths & Sacred Cows
  - Introduce & examine the idea
  - How it functions
  - How it can go sideways
  - Recommendations

Sacred cow [AI generated image]. (2024, April 14). https://gencraft.com/.

Setting the Stage

CHALLENGING ASSUMPTIONS BEHIND HEALTH & SAFETY THINKING

Assumptions, Myths & Sacred Cows

Pre-Task Risk Assessments Keep People “Safe”

Safety Culture is a Real “Thing”

Safety is our #1 Priority

It is Possible to Have No Incidents

Safety Rewards Develop “Safe Behaviours”

Important Context

- <u>Come from the very best of intentions</u>
- Law of Unintended Consequences
- Impacts and effects vary widely
- Want to fix the “quirks”, keep commitment

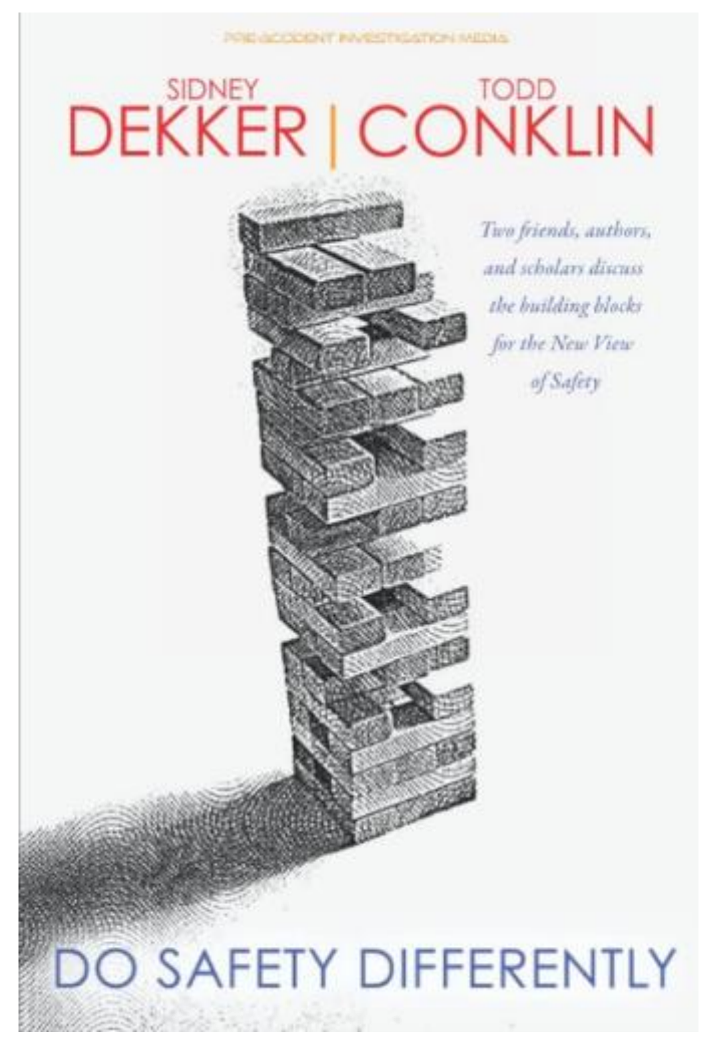
To Start

- You may agree, disagree, or be unconvinced
- Critically examine our “safety thinking”
- We are going to say the “quiet parts out loud”

Ma, L. (2024, February 28). *Do trigger warnings work?* Psychology Today. Retrieved April 12, 2024, from https://www.psychologytoday.com/us/blog/evidence-based-living/202402/do-trigger-warnings-work.

Human & Organizational Performance

- Error is normal
- Blame fixes nothing
- Context drives behaviour
- Learning and improving is vital
- Management response matters



Amazon. (2022). [Book cover - Do Safety Differently]. Amazon.ca. https://www.amazon.ca/Do-Safety-Differently-Sidney-Dekker/dp/B09RM3Z17V

Pre-Task Risk Assessments Keep People “Safe”

CHALLENGING ASSUMPTIONS BEHIND HEALTH & SAFETY THINKING

Pre-Task Risk Assessments

- FLRA
- FLHA
- HIDRA
- HIRA
- LMRA
- Take5
- SPOT
- STOP
- JHA
- JSA
- PEAR
- PRA
- POWRA
- POWSA
- SAFE
- SPSA
- STARK
- STRAP
- SAFE
- STAART

Questions to Ask Yourself

- We do we do pre-task risk assessments?
- What would happen if we stopped?
- Why do I think so? How do I know?
- How confident am I?
- Do I have evidence? Could I prove it?

What if we did an experiment?

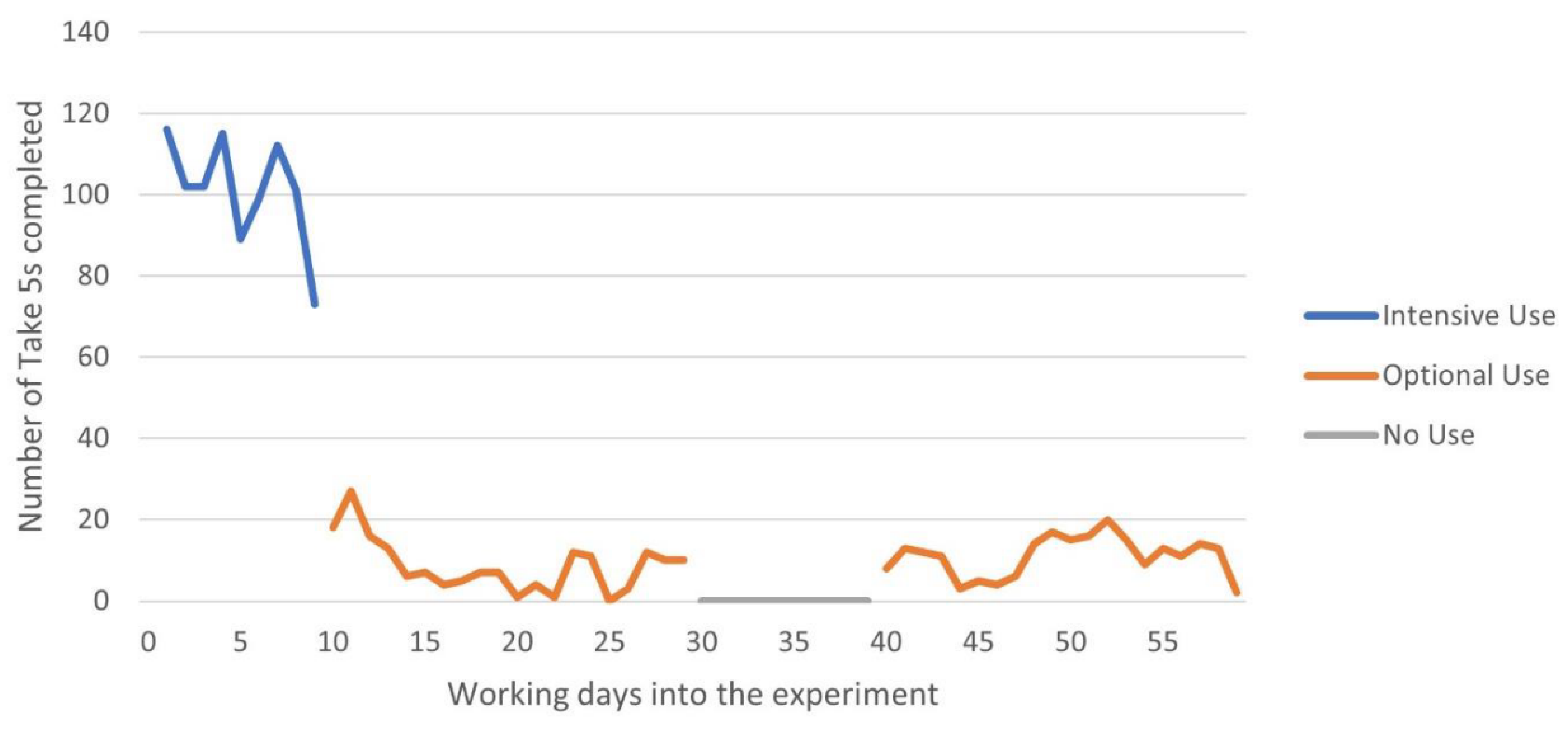
- For 2 weeks require each worker to complete a pre-task risk assessment at the start of every shift
- Then for 4 weeks make them optional
- Then for 2 weeks <u>forbid</u> workers to do pre-task risk assessments
- Then for 4 weeks make them optional again

Article

Should We Cut the Cards? Assessing the Influence of "Take 5" Pre-Task Risk Assessments on Safety

Jop Havinga [1], Mohammed Ibrahim Shire [2] and Andrew Rae [1,*]

Havinga, J., Shire, M. I., & Rae, A. (2022). *Should we cut the cards? Assessing the influence of "Take 5" pre-task risk assessments on safety*. Safety, 8(2), 27. https://doi.org/10.3390/safety8020027.



Havinga, J., Shire, M. I., & Rae, A. (2022). *Should we cut the cards? Assessing the influence of "Take 5" pre-task risk assessments on safety*. Safety, 8(2), 27. https://doi.org/10.3390/safety8020027.

Should We Cut the Cards?

We found no evidence to support any of the purported mechanisms by which Take 5 might be effective in reducing the risk of workplace accidents. **Take 5 does not improve the planning of work, enhance worker heedfulness while conducting work, educate workers about hazards, or assist with organisational awareness and management of hazards.**

Havinga, J., Shire, M. I., & Rae, A. (2022). *Should we cut the cards? Assessing the influence of "Take 5" pre-task risk assessments on safety*. Safety, 8(2), 27. https://doi.org/10.3390/safety8020027.

Should We Cut the Cards?

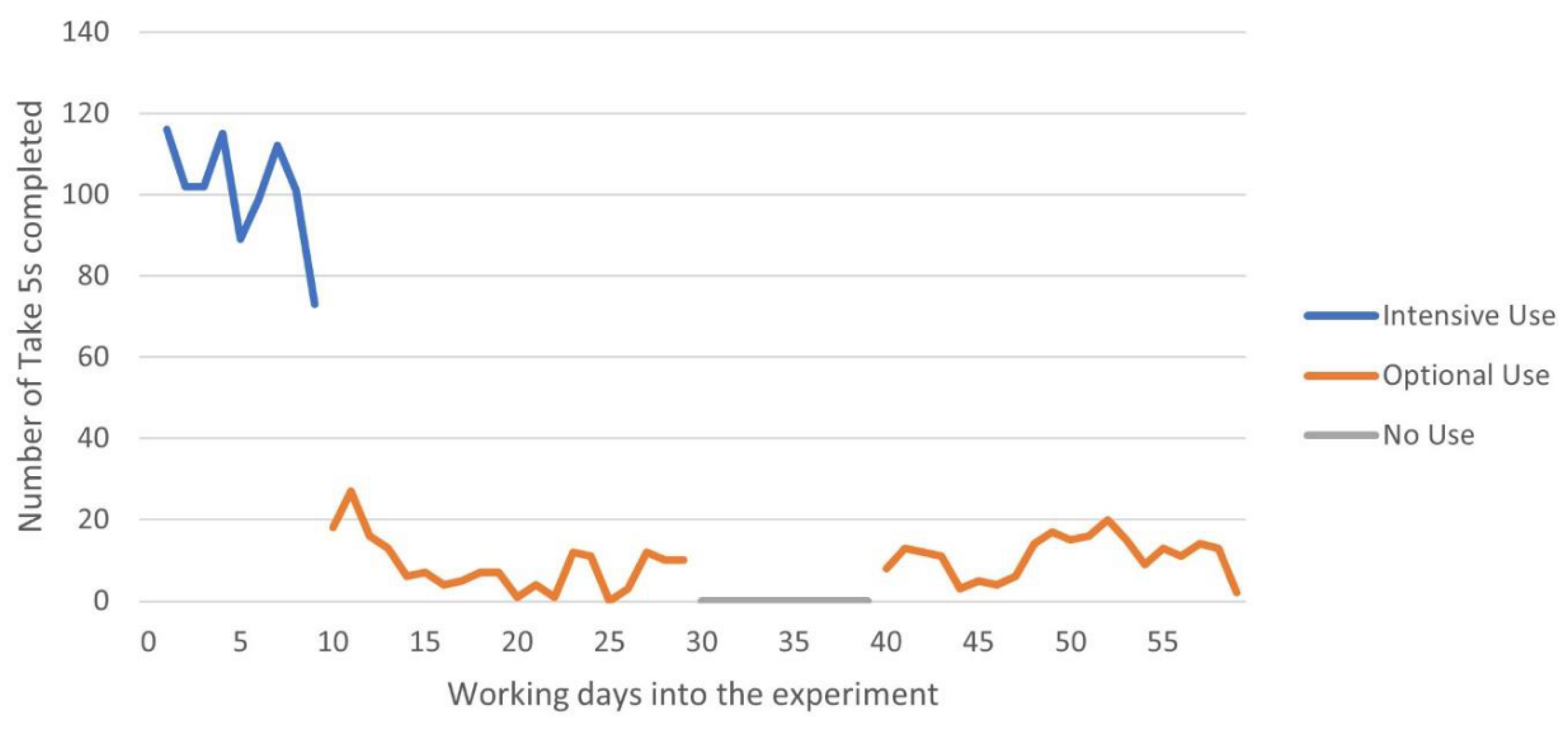
Whilst some workers believe that Take 5 may sometimes be effective, this belief is subject to the "**Not for Me**" effect, where Take 5 is always believed to be helpful for someone else, at some other time. **The adoption and use of Take 5 is most likely to be an adaptive response by individuals and organisations to existing structural pressures.**

Havinga, J., Shire, M. I., & Rae, A. (2022). *Should we cut the cards? Assessing the influence of "Take 5" pre-task risk assessments on safety*. Safety, 8(2), 27. https://doi.org/10.3390/safety8020027.

That’s interesting…

- Is this complete or partial BFE*?
- Do the conclusions surprise you?
- Would your workers agree?
- What do you think about pre-task risk assessments now?

*Bovine Fecal Expostulations



Havinga, J., Shire, M. I., & Rae, A. (2022). *Should we cut the cards? Assessing the influence of "Take 5" pre-task risk assessments on safety*. Safety, 8(2), 27. https://doi.org/10.3390/safety8020027.

Havinga, J., Shire, M. I., & Rae, A. (2022). *Should we cut the cards? Assessing the influence of "Take 5" pre-task risk assessments on safety*. Safety, 8(2), 27. https://doi.org/10.3390/safety8020027.

Havinga, J., Shire, M. I., & Rae, A. (2022). *Should we cut the cards? Assessing the influence of "Take 5" pre-task risk assessments on safety*. Safety, 8(2), 27. https://doi.org/10.3390/safety8020027.

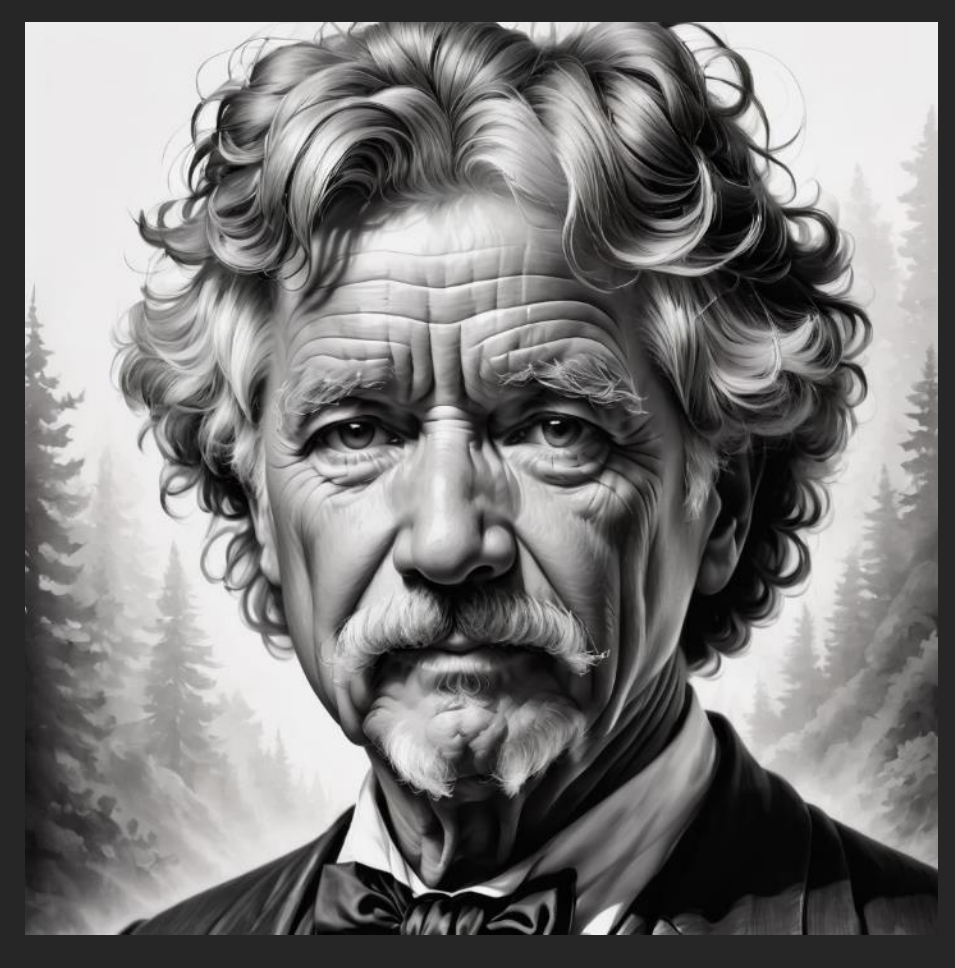
Not Winning Hearts & Minds…

- Don't do Take5, get in trouble, so PPE*
  - *Context drives behaviour*
  - *Management response matters*
- Incidents: "Where's your Take5?"
  - *Context drives behaviour*
  - *Management response matters*

*Protection of Posterior Exits

What to do?

- For most organizations it would be impossible to drop pre-task risk assessments
- ..”an adaptive response by individuals and organisations to existing structural pressures”
  - *Context drives behaviour*
- Look for opportunities to change how they work
  - *Management response matters*



Mark Twain [AI generated image]. (2024, April 20). https://gencraft.com/.

It ain’t what you don’t know that gets you into trouble.

It’s what you know for sure that just ain’t so.

Attributed to Mark Twain

Safety Culture is a Real “Thing”

CHALLENGING ASSUMPTIONS BEHIND HEALTH & SAFETY THINKING

Critical Eye on Safety Culture

What is “safety culture”?

Is it different from company culture?

Is “safety culture”created?

Does it impact safety outcomes?

Can you reliably “measure” it?

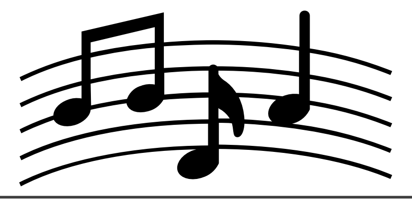
Beethoven bust with hard hat [AI generated image]. (2024, April 14). https://gencraft.com/.

Safety Culture

The safety culture of an organization is the product of individual and group values, attitudes, perceptions, competencies, and patterns of behavior that determine the commitment to, and the style and proficiency of, an organization's health and safety management.

Lee TR (1996). *Perceptions, Attitudes and Behaviour: The Vital Elements of a Safety Culture*. Health and Safety 10:1-15.

Culture



The set of shared attitudes, values, goals, and practices that characterizes an institution or organization.

(as it applies to safety)

Definition of culture. (2023, September 23). Merriam-Webster: America's Most Trusted Dictionary. Retrieved March 29, 2024, from https://www.merriam-webster.com/dictionary/culture.

Assumptions

- Shared safety attitudes, values, goals, and practices make up a real and distinct “thing”
- Safety performance is a result of, or best explained by, your “safety culture”
- *Safety culture is not organizational culture*
- *A “good” or “bad” safety culture can exist even when in conflict with the organizational culture*

Cultural Appeal

Explanatory factor for safety results

More “mindset”, “engagement”, “hearts and minds”

Still links individual accountability and system requirements

“Separate”, so it can be managed and evaluated separately

Taylor Swift with hard hat and safety vest [AI generated image]. (2024, April 14). https://gencraft.com/.

“Safety Culture” is a Myth

- **“…thing having only an imaginary or unverifiable existence.”**[1]
- Management “culture” is the safety “culture”
- When management and safety “cultures” clash, safety will realign
  - “The adoption and use of Take 5 is most likely to be an adaptive response by individuals and organisations to existing structural pressures.”[2]

1. Definition of myth. (2023, October 5). Merriam-Webster. Retrieved March 31, 2024, https://www.merriam-webster.com/dictionary/myth
2. Havinga, J., Shire, M. I., & Rae, A. (2022). *Should we cut the cards? Assessing the influence of “Take 5” pre-task risk assessments on safety*. Safety, 8(2), 27. https://doi.org/10.3390/safety8020027.

The Safety MCU (Mythical Cultural Universe)

- Pre-task risk assessments keep people “safe”
- Safety is our top priority
- It is possible to have no incidents
- Safety rewards develop safe behaviours
- Our people do *insert safety activity here*

Iron Man with hard hat and safety vest [AI generated image]. (2024, April 14). https://designer.microsoft.com/image-creator.

“Good Safety Culture”

- Employees must do a daily HazID
- COR certificate for +10 years
- Have a “safety first” attitude
- The best safety performer gets a trip to Mexico
- Everybody attends our annual Safety Stand-Down

One guy got killed this year, but he did a dumb thing.

(Which lots of people do, Work as Done)

Mona Lisa with hard hat and safety glasses [AI generated image]. (2024, April 20). https://designer.microsoft.com/image-creator.

Return of the Conductors

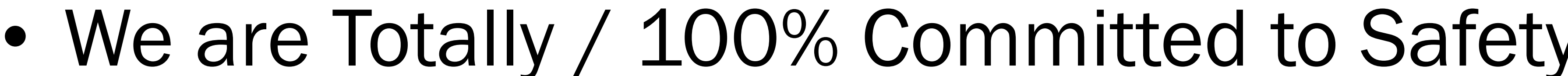
- Work on moving the immovable object
- Shift “safety” from Safety to Management
  - *Context drives behaviour*
- Management (in)action is what matters
  - *Management response matters*

Safety is Our #1 Priority

CHALLENGING ASSUMPTIONS BEHIND HEALTH & SAFETY THINKING

What this Looks Like

- Safety First
- Safety is #1
- Safety Always
- We will Never Compromise the Safety of our People
- We are Totally / 100% Committed to Safety



Safety hard hat labels - Safety first last Always. (n.d.). Seton Canada. Retrieved April 12, 2024, from https://www.seton.ca/safety-hard-hat-labels-safety-first-last-always-1220d-1.html

Questioning the Priority of Safety

- What does “safety first” mean?
- If it is “first”, what is “second” or “third”?
- Should it be “first”? Why or why not?
- What would happen if it was not “first”?
- Does saying “safety first” change anything?

"Here's an honest question – would you be OK if the government reduced the posted speed limits by 50%, required all motorists to wear helmets, and outlawed all left turns? If not, why not?

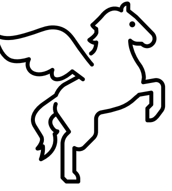
Doing so would save almost 40,000 lives a year."

Mike Rowe

Emphasis Added

Walk me through this "Safety third" thing. (2020, March 24). Mike Rowe. Retrieved April 6, 2024, from https://mikerowe.com/2020/03/walk-me-through-this-safety-third-thing/.

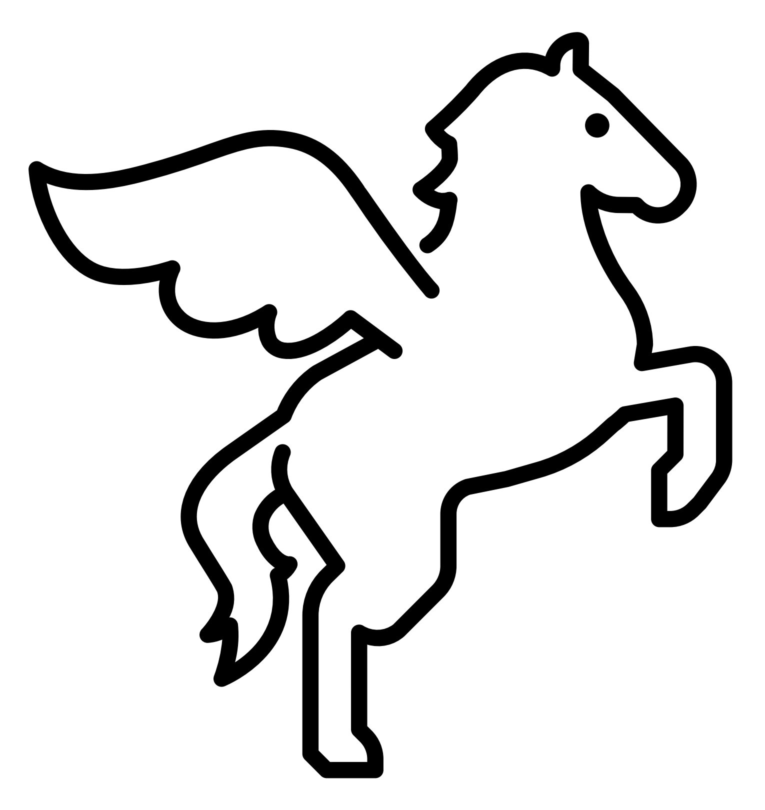
“Safety First” is a Myth



- **“…thing having only an imaginary or unverifiable existence.”**[1]
- Organizations exist to make a profit (capitalism) or provide a service (nonprofit) or both
- Priorities are reshuffled based on context
- People do not live (or work) as if safety is #1
  - Mike Rowe and Safety 3rd

1. Definition of myth. (2023, October 5). Merriam-Webster. Retrieved March 31, 2024, https://www.merriam-webster.com/dictionary/myth.

Safety First in Action



Management says things like "*safety is more important than profits*"

This creates expectations, including that some issues will "be fixed"

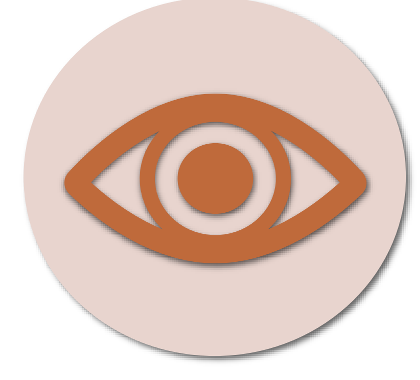
Expectations can be reasonable or unreasonable

Common Interpretation

All other priorities are, or must be, subordinated to safety considerations.

A Story of Unintended Consequences

SAFETY GOES FROM FIRST TO SECOND – MAYBE THIRD?

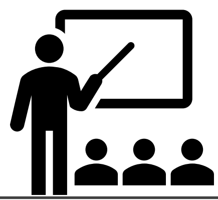


WORKERS SEE THAT WORDS AND ACTIONS DO NOT MATCH

MAY FEEL BITTER, ANGRY, DECEIVED, DEVALUED

“MOTIVATION FOR SAFETY” TAKES A HIT

Teaching the Wrong Lesson



- Trust drops and BFE* detectors tune up
  - *Context drives behaviour*
- “Buy-in” drops, “going through the motions” starts
  - *Context drives behaviour*
- Reporting declines (management is not serious)
  - *Learning and improving is vital*
- Management may “double-down”, repeat cycle

*Bovine Fecal Expostulations

What to Do?

- Drop anything officially "Safety First"?
  - Maybe let it slowly fade, replaced by something else
- Put safety a "core value" among others
  - Priorities change, core values don't
- Draw red lines – Right to Refuse, Life Saving Rules – and mean it

There are no solutions.

There are only trade-offs.

Thomas Sowell

Sowell, T. (2007). *A conflict of visions: Ideological origins of political struggles*. Basic Books.

It is Possible to Have No Incidents

CHALLENGING ASSUMPTIONS BEHIND HEALTH & SAFETY THINKING

Variations, Permutations, Gradations

- Zero Incident Culture / Organization
- Journey / Road / Path to Zero
- Goal / Target Zero

Ismail, K. (2019, August 23). *How can businesses reach a goal of zero incidents?* HSSE WORLD. Retrieved April 12, 2024, from https://hsseworld.com/how-can-businesses-reach-a-goal-of-zero-incidents/

Zero, Critically Speaking

What does “zero incidents” mean?

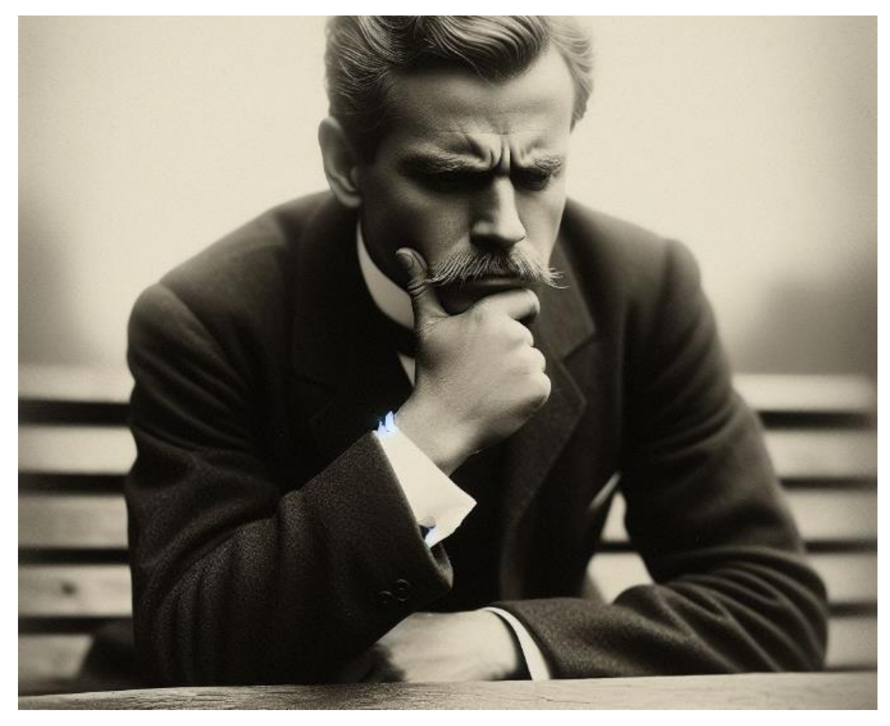
Is it possible to have zero incidents?

Is this opinion or “justified belief”?

What evidence do we have?

How reliable is that evidence?

Is there a downside to “zero”?



Man thinking hard [AI generated image]. (2024, April 14). https://designer.microsoft.com/image-creator.

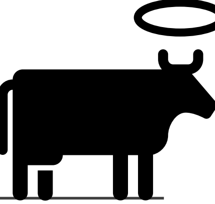
Management Intends Zero

- Demonstrate commitment to safety
- Help create a “safety culture” that is committed to a praiseworthy goal or target
- Create the expectation that staff can and will do what is possible to approach or hit “zero”
- Often a “journey” or “road to..” – not meant as an absolute

Assumptions

- All incidents are preventable, because
  - All hazards can be identified, and
  - All hazards can be controlled
- *People only need to follow the system*
- *Failure to follow the system causes incidents*

“Zero Incidents” is a Sacred Cow



- **“...often unreasonably immune from criticism or opposition.”**[2]
- For many this has become an “article of faith”
- Questioning “zero” can mean you:
  - “Lack sufficient commitment to safety”, or
  - “Do not share the values of the organization.”

2. Definition of sacred cow. (2024, March 14). Merriam-Webster. Retrieved March 31, 2024, from https://www.merriam-webster.com/dictionary/sacred%20cow.

Zero Response from Frontline Staff

- They believe and "know" it is BFE[1], ***<u>BUT</u>***
- Also perceive incidents are more than just "unacceptable" to management
- Hyper-sensitized to any management response
  - *Management Response Matters*
- Actions are heavily influenced by PPE[2]
  - *Context drives behaviour*

[1]Bovine Fecal Expostulations [2]Protection of Posterior Exits

When the Road to Hell is Paved with….

- Incidents can become “sins”
- Seen as personal or group faults – and punished as such
  - *Management response matters*
- Failure to follow the system
- Failure to maintain the system

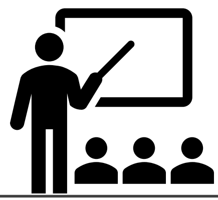
Holy cow with halo [AI generated image]. (2024, April 14). https://gencraft.com/.

“Safety” Can Become Pathological

	Incidents unreported, hidden (PPE*)	*Blame fixes nothing*
	Safety rewards can make this worse	*Context drives behaviour*
	Psychologically unsafe workplace?	*Error is normal*

*Protection of Posterior Exits

Shift to Learning Mode



- Drop “zero” as required, preferable, or a goal
  - *Error is normal*
  - *Blame fixes nothing*
- Recalibrate your response to incidents and other bad news (psychologically safe workplace)
  - *Management response matters*
  - *Learning & improvement is vital*

Safety Rewards Develop “Safe Behaviours”

CHALLENGING ASSUMPTIONS BEHIND HEALTH & SAFETY THINKING

Get the Full Presentation

- This conference's website
- Menus: Past Conferences / 2023 Presentations
  - Session 104 – Michael R Fears
- Or join me at Safety 2024 – 15th World Conference on Injury Prevention and Safety Promotion (New Delhi, India) - www.WorldSafety2024.com

2 Ways to Lead the Horse to Water

- External motivation (Extrinsic)
- Internal motivation (Intrinsic)

External Motivation Assumptions

- People are more likely to engage in the desired behaviour if they can expect explicit rewards for doing so
- People will not engage in the behaviour unless the reward is expected and tied to the behaviour

What do We Reward?

- Timed targets – 2 Near Misses a week
- Hitting numbers – most HazIDs in month
- Basic metrics – 25% less recordables
- Project incentives – No Lost Time

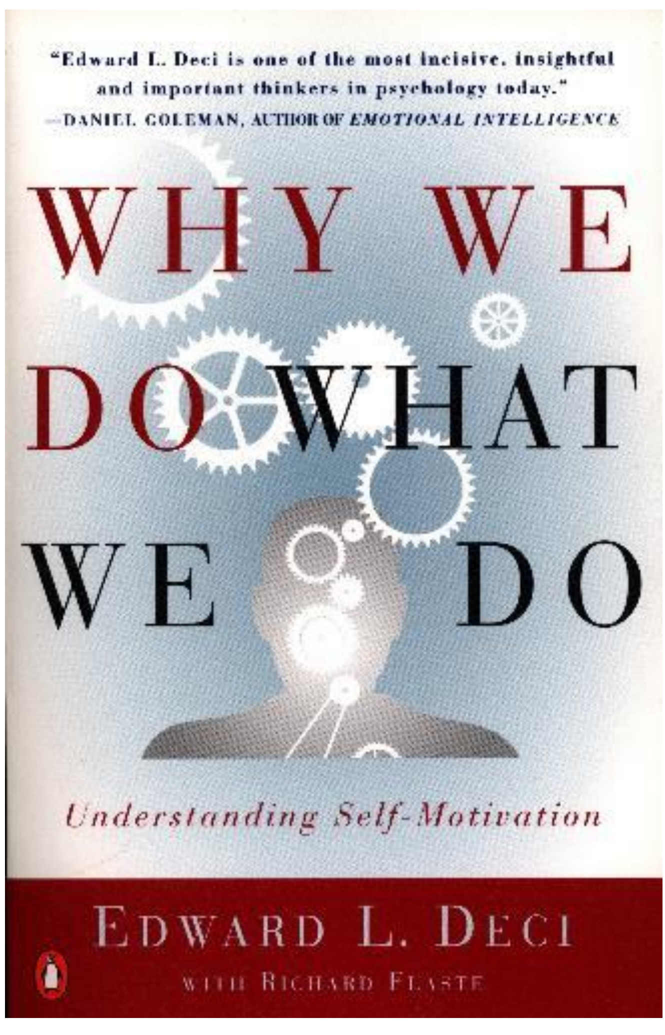
The Rewards

- Gift cards
- Safety store points
- Backpacks / Jackets
- Company swag
- Lotteries
- Lunch with CEO
- Pizza parties
- Shout-out at shutdown

Unintended Consequences

- Quantity over quality
- Free-loaders in group rewards
- Competition among staff or not “playing the game”
- Incidents hidden to ensure rewards are received

Psychology Says…



- People who are **paid** to perform an activity today….
- **Are not likely to perform that activity in the future if they are not paid**

Deci, E. L., & Flaste, R. (1996). *Why we do what we do: Understanding self-motivation*. Penguin Books.

MONEYWATCH ›

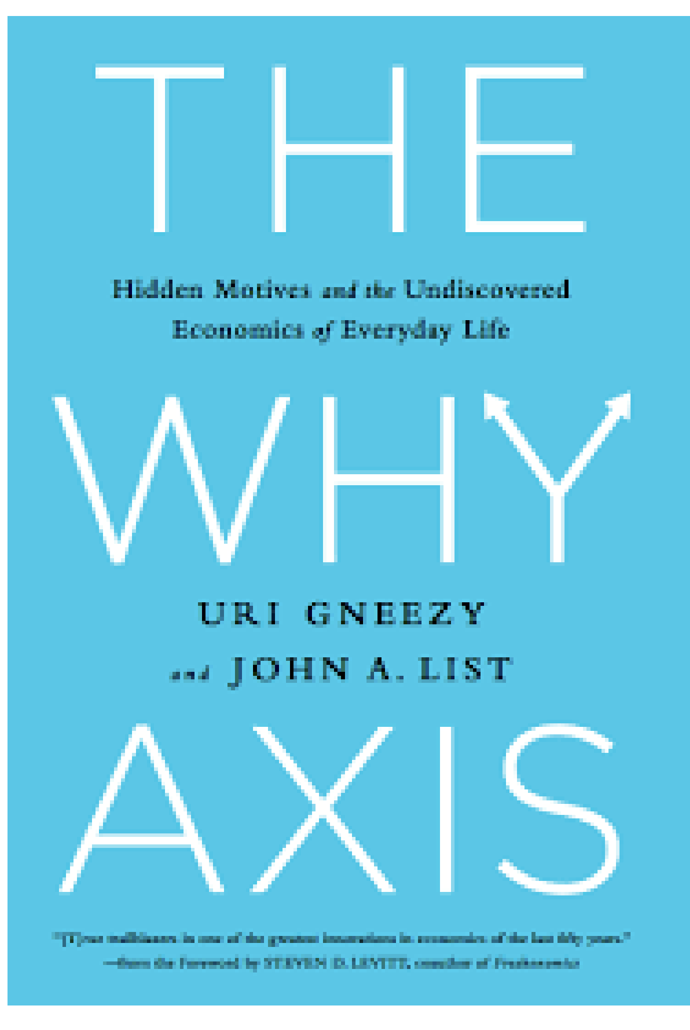
MillerKnoll CEO sparks backlash after telling employees to "leave Pity City" over lack of bonuses

BY AIMEE PICCHI

UPDATED ON: APRIL 19, 2023 / 11:23 AM / MONEYWATCH

Picchi, A. (2023, April 19). *MillerKnoll CEO sparks backlash after telling employees to "leave pity city" over lack of bonuses*. CBS News. Retrieved April 20, 2023, from https://www.cbsnews.com/news/millerknoll-ceo-andi-owen-leave-pity-city/

Psychology Says…



- We will engage in activities freely if sufficiently motivated
- Adding compensation can totally change the perception and underlying motivation

Gneezy, U., & List, J. (2016). *The Why Axis: Hidden motives and the undiscovered economics of everyday life*. Harper Collins.

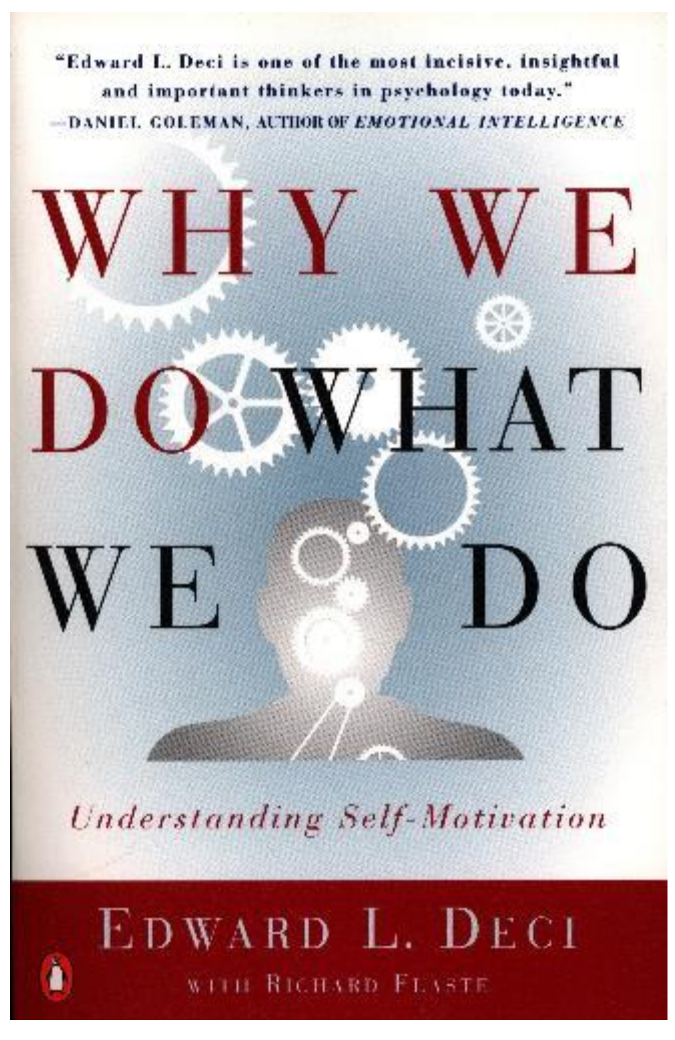
Voluntary	Compensation
This has been a great date. Would you like to go to my place for a coffee?	This has been a great date. Would you like to go to my place for a coffee? I'll even pay you $200.

Gneezy, U., & List, J. (2016). *The Why Axis: Hidden motives and the undiscovered economics of everyday life*.

We Really Want

People to be self-motivated to consistently engage in the behaviours we want.

Psychology Says…



The proper question is not "how can I motivate others?" but rather "***how can people create the conditions within which others can motivate themselves?***"

Emphasis & Underline Added

Deci, E. L., & Flaste, R. (1996). *Why we do what we do: Understanding self-motivation*. Penguin Books.

Internal Motivation Assumptions

- People are internally motivated to do things that align with their individual priorities and/or image of themselves

- People are more likely to do something when they feel “in control”, they feel it is their decision (not required or forced)

The “No Program”

1. Form a committee
2. Identify key behaviours you want to reinforce
3. Identify individual(s) to reward
4. Supervisor rewards without reward
5. Supervisor rewards with “personalized” reward

Sources & Recommended Reading

Cameron, I., & Duff, R. (2007). A critical review of safety initiatives using goal setting and feedback. *Construction Management and Economics*, 25(5), 495-508. https://doi.org/10.1080/01446190701275173

Carnegie, D. (2014). *How to win friends and influence people*. HarperCollins.

Cialdini, R. B. (2021). *Influence, new and expanded: The psychology of persuasion*. HarperCollins.

Cialdini, R. (2016). *Pre-suasion: A revolutionary way to influence and persuade*. Simon & Schuster.

Clear, J. (2018). *Atomic habits: An easy & proven way to build good habits & break bad ones*. Penguin.

Deci, E. L., & Flaste, R. (1996). *Why we do what we do: Understanding self-motivation*. Penguin.

Duhigg, C. (2013). *The power of habit: Why we do what we do and how to change*. Random House.

Gneezy, U. (2023). *Mixed signals: How incentives really work*. Yale University Press.

Gneezy, U., & List, J. (2016). The Why Axis: Hidden motives and the undiscovered economics of everyday life. Harper Collins.

Goldstein, N. J., Martin, S. J., & Cialdini, R. (2008). *Yes!: 50 scientifically proven ways to be persuasive*. Simon & Schuster.

Grenny, J., Patterson, K., Maxfield, D., McMillan, R., & Switzler, A. (2013). *Influencer: The new science of leading change* (2nd ed.). McGraw Hill Professional.

Havinga, J., Shire, M. I., & Rae, A. (2022). *Should we cut the cards? Assessing the influence of "Take 5" pre-task risk assessments on safety*. Safety, 8(2), 27. https://doi.org/10.3390/safety8020027.

Sources & Recommended Reading

Houette, B., & Mueller-Hirth, N. (2022). Practices, preferences, and understandings of rewarding to improve safety in high-risk industries. *Journal of Safety Research*, 80, 302-310. https://doi.org/10.1016/j.jsr.2021.12.013.

Judge, K. (2020). *Goal Setting and Unethical Behavior: Implications for Occupational Safety and Health and the Safety Incentive Program* (28400100) [Master's thesis]. ProQuest Dissertations and Theses Global.

Kahneman, D. (2011). *Thinking, fast and slow*. Doubleday Canada

Levitt, S. D., & Dubner, S. J. (2020). *Freakonomics: A rogue economist explores the hidden side of everything*. William Morrow.

Phillips, J. J., Phillips, P. P., & Pulliam, A. (2014). *Measuring ROI in environment, health, and safety*. John Wiley & Sons.

Sarkus, D. J. (2002). Getting the most from safety incentives. *Industrial Safety and Hygiene News*, *36*(8), 30-32. https://www.ishn.com/.

Sinek, S. (2011). *Start with why: How great leaders inspire everyone to take action*. Penguin UK.

Sutherland, M.B. (2020) Safety culture: Ideas and advice from the safety trenches. Professional Safety, March, 28-30. www.assp.org

Thaler, R. H., & Sunstein, C. R. (2009). *Nudge: Improving decisions about health, wealth, and happiness*. Penguin.

Voss, C., & Raz, T. (2016). *Never split the difference: Negotiating as if your life depended on it*. HarperCollins.

Workman S. (2018). Are safety incentive programs effective? *Professional Safety*, February, 66-67. www.assp.org

Recommended “Safety 2.0” Reading

Bryant, J., Lyth, J., Robinson, B., & Sutton, B. (2023), *4Ds for HOP and learning teams*. Learning Teams Inc.

Conklin, T. (2019). *Pre-accident investigations: An introduction to organizational safety*. CRC Press.

Conklin, T. E. (2019). *The 5 principles of human performance: A contemporary update of the building blocks of human performance for the new view of safety*. Independently Published.

Dekker, S. (2014). *Safety differently: Human factors for a new era* (2nd ed.). CRC Press.

Dekker, S. (2017). *The Field guide to understanding 'Human error'*. CRC Press.

Dekker, S., & Conklin, T. (2022). *Do safety differently*.

Hollnagel, E. (2017). *The ETTO principle: Efficiency-thoroughness trade-off: Why things that go right sometimes go wrong*. CRC Press.

Hollnagel, E. (2017). *Safety-II in practice: Developing the resilience potentials*. Routledge.

Hollnagel, E. (2022). *Synesis: The unification of productivity, quality, safety and reliability*. Routledge.

McCarthy, G., Robinson, B. M., & Sutton, B. (2020). *The practice of learning teams: Learning and improving safety, quality and operational excellence*.

Muschara, T., Farris, R., & Marinus, J. (2021). *Critical steps: Managing what must go right in high-risk operations*. CRC Press.

Reason, J. (1990). *Human error*. Cambridge University Press.

Schein, E. H. (2013). *Humble inquiry: The gentle art of asking instead of telling*. Berrett-Koehler Publishers.