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Can We Be Both Safe and Sorry?
When safety programs reach saturation

Zara Hart Mapp, (Psych) BA, Psych (Hons)
Senior Consultant
Industrial Foundation for Accident Prevention
Perth, Western Australia

Introduction

Better to be safe than sorry is a maxim that is often applied in the safety profession. We spend our careers designing and implementing preventative measures, so as to ensure that risk is eliminated or mitigated within the work place. Every year around the globe, there are thousands of new safety initiatives, commenced with millions of employees. Whilst these initiatives undoubtedly have well intentioned beginnings, I wonder how many safety professionals consider the possibility, that the end point could be negative for safety, for health and for the workplace culture.

In my work as a corporate Psychologist for IFAP (the Industrial Foundation for Accident Prevention) in Australia, I study aspects of organizational safety culture. I conduct surveys and focus groups, collecting both quantitative and qualitative data. Importantly, I get to speak candidly with the individual employees and the work teams who become the embodiment of an organization's safety system in their attitudes, beliefs and behaviours.

Characteristic of the organizations I work with is a strong drive towards international best practice in safety. In these organizations, there is ample time, money and resources for safety and health programs. Managers are educated and committed, employees are involved and "Safety first" is the catch cry. All of this energy and effort has lead to safety surrounding the employee, and barely a month goes by without industrious safety professionals churning out new procedures, training and information.

This approach may be familiar to many of us as safety professionals. Indeed, across the span of my career in safety, I have been somewhat conditioned to believe in the basic assumption that safety focused organizations create positive outcomes for the workforce. In other words, for me, *more safety* has been synonymous with *more safe*. Recently, I have been seeing cultures that challenge this supposition.

One such culture is that of a large, multinational organization operating in high risk environments. I was invited by the local safety committee to come and measure culture in one business division of their work place, as there was a curiosity about why the behaviour based safety system was experiencing poor support. On the surface, this company has some very impressive safety management initiatives. One example was their permit to work system. It appeared to be comprehensive and logical ensuring that each set of hazards were

carefully dealt with from a hierarchy of hazard control perspective. Behaviour based safety was also available to round out the tools available for reducing risk.

In reality, I found that there were some significant problems. The safety culture was ailing badly. Amongst the work teams, perceptions of management commitment to safety were low, and avoidance of the permit to work rigour and reported risk taking behaviour were high. Commentary with regards to safety was tinged with bitterness and frustration.

All of this was evident, despite a through, detailed safety management system that would satisfy many auditors as being amongst the world's best. I think the words of one employee summed up the inspiration for this paper. He said:

"We are developing a culture where we spend our time thinking about the safety system and devising ways of; how to get around this?"

In further explanation of his comment, he stated:

"The safety processes involved in doing a simple job can be overcomplicated, this detracts from safety. A job can be fifty to seventy percent paperwork. If they want to make a job safe, they should make the paperwork easier to do"

He was not alone in his opinions; other colleagues stated:

"It can take six hours to do paperwork and eight minutes to do the job. Some jobs get put aside purely because the paperwork is too cumbersome. It is like we are reinventing the wheel."

And perhaps more disturbingly:

"Sometimes safety procedures take away your good decision making and reduce awareness. Rather than look at hazards, you read the procedure. It takes away common sense."

Taken together, the comments of this group of employees represent a situation that is untenable for safety. Moreover, I believe that it is not isolated to a singular organization, as I have seen this same frustration echoed in many workplaces that I visit.

The purpose of today's paper is to explore the ways in which "a culture of how to get around this?" may evolve. In other words, how safety processes which require time and cognition might reach a saturation point within a culture, yielding negative outcomes for individuals and work teams beyond that point.

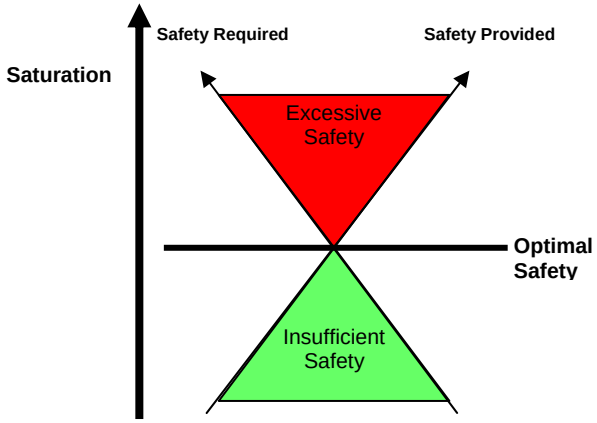
A model of safety saturation will be posed and the elements and effects discussed. I will preface this discussion with the statement that the model is hypothesised and in the process of being studied, with much research still to be done. However, I hope to bring in some existing research from the field of psychology to present some evidence for my basic assumptions. Ultimately, it is also hoped that delegates will be challenged to investigate their own approach to intervention in safety, to avoid saturation and its adverse effects on individual wellbeing and organisational culture.

Safety Saturation Defined

At an organisational level, safety saturation is defined as the point in the development of a safety culture where the addition of more safety initiatives will not improve safety outcomes. It is hypothesized that past the point of saturation, the organization will experience excessive safety, which represents a waste of time and resources and has a negative effect on culture. When excessive safety is present, it is manifested in negative outcomes for safety and health in the form of increased cognitive failure, and stress, and at risk behaviour (i.e. short cuts, non compliance etc).

The model in Exhibit 1 is inspired by the model of supply and demand in the Economics discipline, in terms of structure and appearance. Just as economists will know that the equilibrium price point of a product is governed by forces of supply and demand, safety and health professionals should know intuitively that the meeting point of the safety initiatives that employees are provided with (i.e. Safety Supplied) and safety initiatives that are required for mitigation of risk (i.e. Safety Required) in a culture is the point of optimal safety. Past that point, more safety is excessive, saturating the culture and daily working lives of employees.

Exhibit 1 Model of Safety Saturation



Explanation of the Model of Safety Saturation (Exhibit 1)

- Safety required is the amount of safety that is necessary to mitigate hazards at any given time. Safety required inversely proportional to saturation. The higher the saturation, the less safety the employees will require.
- Safety provided is the quantity and quality of the safety initiatives (materials equipment, training and support services) in the organisation at any given time. Safety provided is directly proportional to saturation.
- When the safety required is not equal to the safety initiatives provided, safety is insufficient.
- When the safety that is required is the same as that which is provided, safety is optimal in the organisation.
- When safety initiatives are provided beyond the point of optimal safety they are surplus to requirements and there is excessive safety (saturation).

In the model of safety saturation, excessive safety represents a waste of time and resources for the organisation and the safety professionals, creating a negative impact on the safety culture. Moreover, it represents a negative influence on the safety of the employee, as safety initiatives require time and cognition, and excessive pressure on employees is experienced as role related stress.

Excessive Safety from and Employee's Perspective

If you are an employee in a safety focused organisation, working in a caring environment that protects and improves your safety can positively influence your wellbeing. On the other hand, it is possible to have too much of a good thing. When safety moves from *influencing* to *eclipsing* all important activities in your working life, you will start to feel in need of respite from the very things that were designed to protect you.

Exhibit 2. He's Already Saturated, Lets Consider Turning off the Supply

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Perhaps a familiar analogy will help to 'drive" the experience of safety saturation to you. Imagine that every single day on your way to work in your car; you face extensive traffic that you must navigate, before your working day can even begin. On the freeway into your city, the chances of traffic building up are high and sometimes the traffic jam will leave you immobile and frustrated.

Because you are clever and inventive, you have thought this problem through and you have come up with a way to avoid the obstacles of the freeway. However, it will involve a short cut. You will need to go through side streets and navigate several turns. You will have to pass several traffic lights along the way. Are you tempted to take the short cut? I know I am. Imagine still, that when you think it through, you realise that the short cuts involve more risk. You'll be going a little faster to make up for the extra distance, skirting the corners and running orange lights to save time. Still tempted?

For some employees, excessive safety and health requirements in their job represent a crushing, bumper to bumper traffic situation. For those employees, the stop start action of the traffic jam continues all day, for each working day. Employees from my client's organisation explained their feelings regards to this very situation:

"I feel restricted in my human ability to work safely. I am a mature person with a lifetime of experience and my confidence is undermined by the psychological pressure of the safety requirements"

"*It impairs judgement and generates high levels of frustration. How is a person to consider all these things whilst trying to do a simple job? Too many things to think of"*

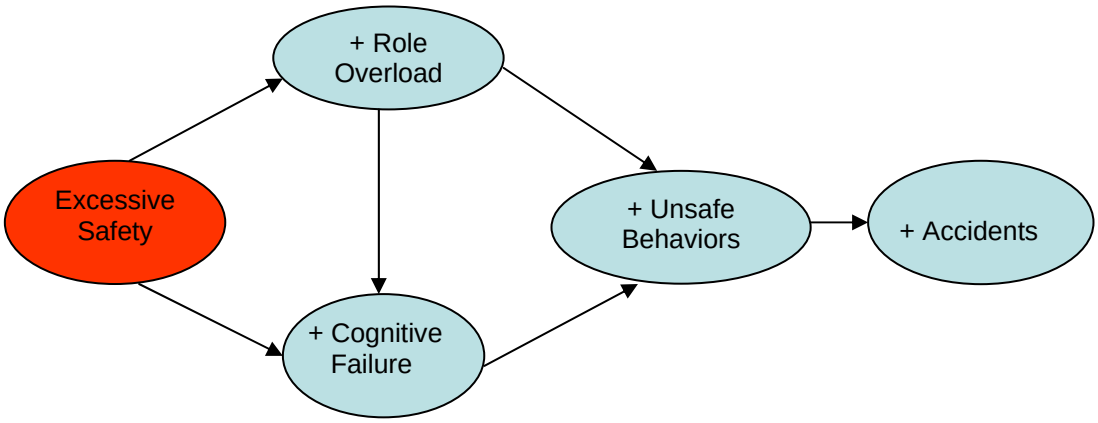
Naturally, avoidance of the situation becomes a motivating factor. Avoidance can be manifested in short cuts or counter control measures. Employees explained this:

"Most people don't follow the safety procedures word for word, they get use their own interpretation"

"When safety managers come, some jobs don't get done. We either wait till they are asleep or go home."

In the model of safety saturation, excessive safety is hypothesised to have adverse effects on the employee stress and concentration which in turn impacts on safety outcomes. Exhibit 3 depicts how this may occur.

Exhibit 3. Impact of Excessive Safety on Accidents



There is some excellent research available in the psychology literature as to the effect of excessive work demands on role related stress and safety. Role overload occurs when a person simply has *too much to do* in the time available (Behr, Walsh and Taber 1976). Some of the hallmarks of role overload include the feeling of having too much responsibility, a workload that is too heavy and the perception of being overburdened by the work role. Role overload has been found to be an important predictor of the ability to regulate safe working behaviour (Hoffman, Jacobs and Landy, 1995).

Do you ever experience the following?

- Are easily distracted by co workers?
- Do not focus your full attention on work activities?
- Throw away something you meant to keep?
- Day dream when you ought to be listening to someone?
- Forget where you have put something in your job?

According to Wallace and Chen (2002), creators of the Workplace Cognitive Failure Scale (WCFS), these happenings are some of the signs of cognitive failure. At a conference, that might just mean that you are having too good a time. At work, cognitive failure leads to unsafe behaviour, which leads to accidents.

Conclusion

As professionals in safety, we share with our organisations the goal of a workplace where employees are *thinking safely, acting safely, and working and living in safety*. A worthy goal indeed. For many of our organisations, progress towards the goal involves the production or procurement of great quantity and varied quality of systems, initiatives, checks, double checks, barriers and equipment. No doubt we will all leave this wonderful conference event with many new ideas to add to our safety system

A challenge for the audience members – think about the way your organisation goes about achieving the goal and whether there is a need to avoid saturation:

- If Macquarie is considering publishing an acronym dictionary for your organisation's safety system alone, you could start to be concerned about excessive safety.
- If your employees need fall protection equipment to climb to the top of the pile of safety paperwork they must read and know, then there may be a problem.
- If you need to start doing job safety analysis on the job of writing job safety analysis for fear of occupational overuse, you know things have gotten out of hand.

If there is a figurative a traffic jam, and employees are dreaming of "how to get around this?" consider the part you, as safety professionals have to play in regulating the flow of safety.

In the future, instead of planning for more safety, it is hoped that we can plan for a *balance* between that which is required and that which is provided. If we consider the costs of our new ideas in terms of cognitive load and role related stress on employees as well as in terms of financial and resource costs, we will yield the most benefits for safety. This approach will ultimately bring us closer to optimal safety and minimise the unnecessary time, effort and strain experienced by those who use our safety system.

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