

The First-line Supervisor and Safe Work Behaviour

Juni Daalmans

Contents

Introduction	9
Case study: Fire at the refinery	13
1 Behaviour and risk	23
1.1 The importance of safety	23
1.2 Model of behaviour	24
2 Competencies of safe behaviour	31
2.1 Competency	31
2.2 Summary	34
3 Prioritising	35
3.1 The importance of prioritising for safe behaviour	36
3.2 The essence of prioritising	36
3.3 The context of prioritising	38
3.4 The first-line supervisor and prioritising	38
3.5 Elements of the competency 'Prioritising'	40
3.6 Tips for working with priorities	40
3.7 Prioritising in the case	41
4 Role-model behaviour	43
4.1 The importance of role-model behaviour	44
4.2 The essence of role-model behaviour	45
4.3 The context of role-model behaviour	46
4.4 The first-line supervisor and role-model behaviour	47
4.5 Elements of the competency 'Role-model behaviour'	48
4.6 Tips for working with role-model behaviour	49
4.7 Role-model behaviour in the case study	52
5 Risk awareness	55
5.1 The importance of risk awareness for safe behaviour	56
5.2 The essence of risk awareness	56
5.3 The context of risk awareness	59
5.4 The first-line supervisor and risk awareness	60
5.5 Element of the competency 'Risk awareness'	64

5.6	Tips for working with risk awareness	65
5.7	Risk awareness in the case	66
5.8	Risk awareness and the case	69
6	Regulation	71
6.1	The importance of regulation for safe behaviour	72
6.2	The essence of regulation	73
6.3	The context of regulation	74
6.4	The first-line supervisor and regulation	78
6.5	Elements of the competency 'Regulation'	82
6.6	Tips for working with regulation	83
6.7	Regulation in the case	84
7	Social safety	87
7.1	The importance of social safety for safe behaviour	88
7.2	The essence of social safety	89
7.3	The context of social safety	89
7.4	The first-line supervisor and social safety	91
7.5	Elements of the competency 'Social safety'	93
7.6	Tips for promoting social safety	94
7.7	Social safety in the case study	95
8	Readiness	97
8.1	The importance of readiness	98
8.2	The essence of readiness	98
8.3	The context of readiness	99
8.4	The first-line supervisor and readiness	102
8.5	Elements of the competency 'Readiness'	104
8.6	Tips for working with readiness	105
8.7	Readiness in the case	106
9	Organising	107
9.1	The importance of organising	108
9.2	The essence of organising	110
9.3	The context of organising	112
9.4	The first-line supervisor and organising	113
9.5	Elements of the competency 'Organising'	116
9.6	Tips for working with organising	116
9.7	Organising in the case	118

10	Summary of the seven competencies	119
1	Leading = setting the right priorities	119
2	Leading = setting an example	120
3	Leading = instructing about risk and behaviour	120
4	Leading = establishing rules, explaining, enforcing and investigating	121
5	Leading = monitoring the social safety of the team	123
6	Leading = monitoring the degree of readiness	124
7	Leading = organising safe circumstances	125
11	Glossary	127
	Acknowledgements	131
	More information	132

1 Behaviour and risk

Human behaviour is an important cause of unsafe situations. If you want to influence behaviour, you first need to understand it. As employees take risks at work which can cause them harm or even result in their death, it's important to know: Why do they do that? A number of reasons will be discussed here.

1.1 The importance of safety

It is often thought that a person views their safety as paramount, above that of all others. In practise, this does not appear to be the case. We take risks each day – many small risks and sometimes greater risks. Taking risks is part of our nature. There are various *factors* which can tempt or persuade us to display behaviour which has the potential to harm us or our surroundings. This is called risky behaviour. This book discusses seven of these factors, which are summarised below.

- 1 The employee thinks he or she can generate profit by choosing an unsafe method of working. He or she does this out of concern for the organisation.
- 2 The employee follows the first-line supervisor who tolerates or even promotes unsafe working methods. The supervisor sets a bad example.
- 3 There is little awareness of risk. This may be the case when an employee is not aware of the risk. No alarm bell goes off in the employee's head. But the opposite situation also occurs. An employee has encountered a risk so many times that he or she has become used to it. An alarm goes off but only softly, and it no longer influences safe behaviour.
- 4 Safe behaviour requires too much effort. The employee sees more efficient – but also more unsafe – ways to achieve the goal. In the interest of efficiency, these unsafe methods take precedence.
- 5 The employee imitates the unsafe behaviour displayed by colleagues. The employee performs work following the group's example.
- 6 The employee acts in a sluggish manner and without attention or instead acts panicky and stressed. He or she doesn't have the desired degree of readiness.
- 7 The employee lets himself be influenced by stimuli from his working environment, the circumstances.



1.2 Model of behaviour

Each of the seven factors contributes to the degree of safety exhibited in our behaviour. They work individually but they can also strengthen or weaken each other. It is especially our natural protection – the internal alarm bell – which often is in conflict with the other factors. The seven factors can be found in the above diagram.

These seven factors are further elaborated on here, and they form the foundation of this book.

1 Prioritising the organisation

In the case presented in the previous chapter, there are two clear examples of willingness to take risks because it would be important for the organisation or for others.

In the first example, following the procedures is perceived by those involved as losing many days' worth of production on a part of the site. Considering they don't know the cause of the problems, they also don't understand why such an investment is necessary. In the opinion of the team, all of this only lead to a useless loss of production. Daniel

Kahneman¹ has shown that people hate to lose (he calls this ‘loss aversion’) and therefore want to avoid losing whenever possible.

In the second example, the field operator is prepared to run a personal risk by walking to the burning furnace and switching off the supply of oil. He thinks that the damage will then be limited and the risk of explosion prevented. By taking this action, he hopes to be able to protect his colleagues who are in the fire brigade.

Theory

An employer provides his workers stability as well as social and economic security. We are therefore inclined to prioritise the organisation, even if this comes at the expense of other aspects in our lives. This forms the first factor. Thinking this way, many employees are prepared to work overtime, even if they receive complaints about it on the home front. These employees make their own assessment of what is good for the organisation. In so doing, sometimes they work around a procedure if they are of the opinion that the organisation would benefit from that. They are even prepared to run a great risk to achieve this. In this book, this factor is indicated by ‘prioritising the organisation’.

2 Following the leader

We see in the case that the control room operator immediately follows what the first-line supervisor says. Calling the shift manager for help is seen as agreeing with an immediate restart. Although all actions go against the procedures, the employees in the control room feel they are covered by management.

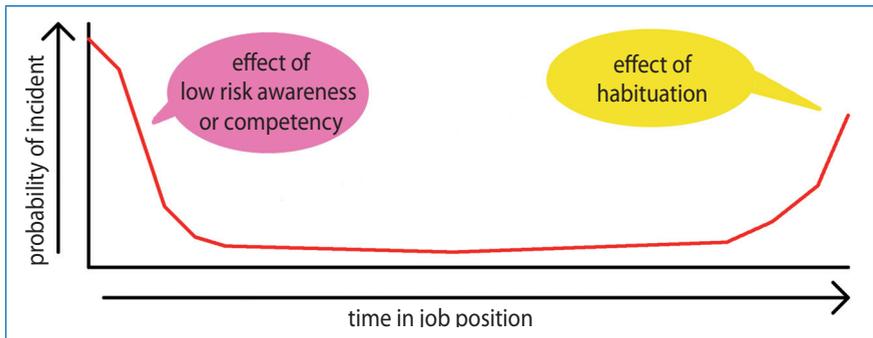


Simulation

Simulations of the work process are an ideal way to have employees familiarise themselves with any problems which may occur. A simulation allows them to experiment with ways to solve problems. This method is used in aviation to teach pilots how to handle crisis situations, such as engine failure or sudden drops in altitude.

Habituation

The flip side of repetition is habituation. Receiving the same stimuli too often in the same place leads to becoming desensitised. The observation of the risk no longer sets off an alarm bell. The efficient brain thinks ‘I know that already’ and continues doing what it was just doing. The brain’s fear centre no longer comes into action. The risk awareness is extinguished. Working too long in the same location or position entices employees into taking increasingly greater risks – veterans run more risk of causing a serious accident. The combination of a limited risk awareness in the beginning and habituation over time lead to the so-called bathtub curve.



The control room operator’s self-confidence enables him to act in the manner he did. The confidence shown in him by the first-line supervisor also plays a role here. Without experiencing this trust, the control room operator would have been much more reluctant in his actions.

5.4 The first-line supervisor and risk awareness

Preliminary work: Risk checklist

Many organisations work with task or position descriptions. Those usually contain only activities. It is advisable to also, and in the same way,

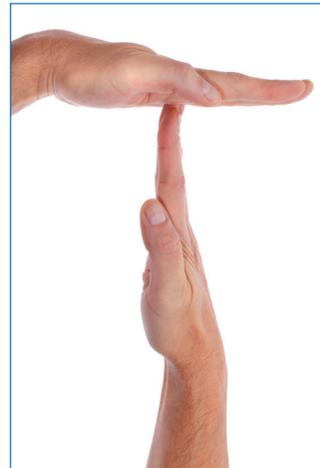
identify the risks which are associated with a task. This means that there must be a checklist of the risks which occur during the execution of a certain task. This list can then serve to educate new colleagues.

Supervising: Test risk awareness

It is the job of the first-line supervisor to verify whether an employee has sufficient risk awareness. The first-line supervisor can do part of this himself during safety rounds. But he will probably delegate part of this task to an experienced colleague or trainer on the team. After all, this colleague has many more opportunities for contact with the employee.

Leading the team: Room for intuition, being able to suspend work

Risk sensitivity is partly intuitive. People find it difficult to put vague feelings about safety into words. Yet these feelings can contain important information. A good first-line supervisor allows for the ability to temporarily suspend work. The hand gesture in the photo indicates the T from 'time-out', which allows time for the safety concern to be discussed calmly. The respect with which someone who is expressing their concerns is listened to determines whether such an airing of concerns will occur more often.



First understand, then act

Disassembling a component, connecting a link, or releasing and starting up a machine: This can only occur safely and responsibly if you realise what you are doing and what the consequences are of the action. Unfortunately, installations are becoming increasingly complex and more automated. This makes it increasingly difficult to understand the consequences of our actions.

The case would have turned out very differently if one of those present had asked for a moment to reflect – asked for a time-out. The employees decided to act without conducting a proper problem diagnosis and identifying the associated risk awareness. Apparently they were not used to reflection, even though the influence of the actions taken was significant.

Tip: Handling unexpected circumstances

Most pressure comes from what you impose on yourself. As soon as you know what you must do when a risk presents itself, the tension decreases. Early notification about what you must do if a project threatens to exceed the schedule takes the pressure off. You must make agreements about this. Such agreements also increase the reliability of the project implementation.

Tip: Thorough LMRA

The Last Minute Risk Assessment (LMRA) has a reputation as a good instrument for managing risks. The ‘what if’ question can also be asked here: What do we do if it seems that the schedule will not be met? This makes employees more sensitive to this topic and arms them against stress.

8.7 Readiness in the case

It is clear that a too-high level of readiness played an important role in the behaviour of those involved and the development of the incident in the case. Long ago, when we still had to fight with animals of prey for our food, we developed patterns which we still use today. The principle is simple: Fear of a strong opponent is a good way to keep your distance. If we can no longer avoid the fight, fear works in an undermining fashion. So when we stand face-to-face with a threat, that feeling of fear had better be switched off.

In the treatment of Factor 3, being aware of risks, it appears that fear is an important advisor of safe behaviour. The awareness of a risk is linked to fear. At the moment when the fear subsides, the risk awareness also disappears. Suddenly, restraints disappear. In combination with a high level of decisiveness, the behaviour can get out of hand in a certain direction. It is especially well-automated behaviour patterns which are then preferred.

The factor ‘prioritising the organisation’ is supported by the factor ‘following group behaviour’ and ‘following the leader’. These three factors provide the focus; readiness provides the energy. This mix forms the ideal recipe for the powerful behaviour of those involved.

9 Organising

Organising is the creation of such circumstances that safe behaviour becomes more likely.



Our automatic pilot is sensitive to stimuli from the outside world. After all, that is where the opportunities and the threats lie. Those who can best understand and utilise their surroundings have the greatest chance of survival. Slowly, more is becoming known about how circumstances influence us. This chapter discusses several methods of influencing which have been researched. If you utilise them, your work behaviour will become safer.