
# Employee Involvement & Teamwork

# Purpose of this document

In this document we discuss a variety of issues relating to the sponsoring of employee involvement and engagement with respect to safety, health and environment (SHE) performance.

The development of employee ownership and engagement are important in achieving a strong and proactive SHE culture. However, achieving such high-level buy-in is not guaranteed. If the conditions are not right, employees may value safety but will not necessarily get involved in an active manner – instead they are likely to act as passive recipients, leaving much of the effort and drive to management.

For those organisations seeking to achieve the highest levels of safety performance, then employee involvement is likely to be not just desirable but essential. The challenge then is how high levels of ownership and engagement can be achieved, and what activities can the employees take on to achieve maximum impact.

This document is written in the context of the PsychaLogica approach to behavioural safety. The development of employee involvement should represent one part of the overall strategy and align and link-in with other aspects.

# Background

Behaviour is often seen to be a key factor in incident causation – and the behaviours that tend to be directly involved are often those performed by members of the workforce (either as errors or violations). It seems logical therefore to focus on the behaviour of employees so as to reduce risk and improve SHE performance. Such a focus is often referred to as *behavioural safety* although the PsychaLogica approach stresses the need for a much wider definition (see the model on the previous page). Whilst employee behaviour is not the only variable of interest to us in our attempts to reduce the propensity for errors to occur and to eradicate unnecessary risk taking, it is nevertheless an important one. How we engage the workforce in the SHE effort requires careful consideration.

In the context of creating greater and effective employee involvement our focus is on a number of key aspects:

- How to set about winning the "hearts and minds" of the workforce
- The principles of systematic behaviour change – applied behaviour analysis
- How to select /design and introduce processes that will achieve buy-in from the workforce and serve to add value in reducing risk
- How to maximise the benefits available from teamwork synergies

At the end of this document we include a summary of some conclusions reached by the Health & Safety executive when conducting a review of employee based behavioural processes.

# Winning "Hearts & Minds"

An organisation has to win the hearts and minds of its employees if it is to achieve the additional effort required to take SHE performance to new heights. Typically, the standards that the organisation aspires to achieving are higher than those that people identify with in their everyday lives. In view of this, employees need to be convinced that the extra effort is worth it. This is set against most people's view, typically based on past experience, that the way they are currently behaving is "good enough" in the context of preventing them from coming to harm.

In addition to this, given that the vast majority of people do not want to get hurt, and that occasional errors and a tendency to engage in risk taking are ***normal*** behaviours (in that we all exhibit them), then the need is to position the challenge as a ***normal*** one. This contrasts markedly with an approach that positions the problem as one of "bad behaviour", often interpreted by the workforce as criticism, which both misrepresents the problem and has the tendency to create defensive positions.

There are a number of aspects to the winning of hearts and minds:

- ***Developing an understanding of the behavioural problem*** and an appreciation that an accident free experience does not guarantee future health and safety within the workforce
- ***Creating a largely positive, open and honest culture and climate*** that serves to reinforce and encourage employee involvement through strong, people-centred and consistent safety leadership
- ***An appreciation and application of positive principles of organisational change*** (eg involving those who are the targets of the change in the design and roll-out of the change process)

All of the above are important in sponsoring greater employee involvement and active engagement in SHE improvement. Where there are deficiencies in any of these, then the repercussions will become evident in a stalled or ineffective change / employee engagement process. Unfortunately, this it too often the case as far as behavioural safety interventions is concerned. The basis for this is that the introduction of a behavioural safety process is often positioned as an initiative / quick fix rather than part of a cultural development programme. If employees are to become more involved and engaged in driving SHE improvement, then it is most important that the ground is extremely well prepared first.

Creating greater engagement and involvement is a cultural challenge. Worker led behavioural safety processes too often fail or are not sustained and our experience is that this is best explained because the underlying culture does not provide the important preconditions for such processes to work. This is because such processes rely on and are designed around voluntary involvement, goodwill and honesty. Without these qualities in place, any behavioural safety process is likely to end up, at best, as a working initiative but one unlikely to add the expected value. The key to an effective intervention is the winning of hearts and minds.

# Applied Behaviour Analysis (ABA)

The process of applying behavioural theory in the context of changing behaviour is referred to as ***applied behaviour analysis*** (ABA). ABA is also more generally known as ***behaviour modification*** and has many applications in a variety of settings. In this section we provide a description of the ABA fundamentals.

Behaviour modification is a methodology that requires systematic and consistent management for it to be successful. In this sense you don't get something for nothing. To eradicate problematic and behaviours resistant to the usual approaches to influence and change requires effort and persistence. It is this aspect of behavioural safety that is most different from normal management practice and also is most demanding of resources (particularly time). However, the results can far outweigh the costs if you consider the damage that can be done in the circumstances where a single unsafe behaviour leads to a major incident.

### The ABA methodology

The steps involved in ABA are as below:

- Identify the problem behaviour, describe it in measurable terms
- Carry out a baseline measure to establish current rate of the behaviour
- Analyse the problem, devise a change strategy and implement it
- Continue measuring to provide a post-baseline measure
- Assess the impact of the change strategy on the basis of the change in the rate of the behaviour
- Continue with or change strategy
- Continue measuring until desired rate of behaviour is achieved

For those familiar with the principles of problem solving and quality circles, these steps will be familiar. There is no magic in the process itself. The dynamic to achieve change is produced in the form of the intervention plan (change strategy) the success of which is evaluated through precise and regular measurement.

### Selecting behaviours

The behaviours selected should be safety critical and where there exists knowledge of or uncertainty about the level of compliance. Given that the process involves the use of precise measurement, there is a need to define the behaviour such that it can be measured. This is typically referred to as ***pinpointing***. This aspect also ensures that there is a high degree of clarity such that everyone should have the same view as to what action the behaviour describes and therefore what they are expected to do. Given the intensity and focus of the process, and people's ability to make changes, the number of behaviours worked on at anyone time will need to be finite. Changing behaviour is not easy and too wide a coverage may only lead to minimal gains.

### Baseline measurement of the behaviour

Having identified and defined the behaviour(s), the next step is to establish more precisely the scale of the problem. This is done through observation with the focus being on watching people in action and counting the number of times the practiced behaviour is of the safe variety and the number of times it is unsafe. This should be a straightforward judgment if the behaviour has been precisely defined. The result of this measurement is provided in the form of %safe, which is calculated as follows:

$$\%\text{safe} = \frac{\text{total number of observations of safe behaviour}}{\text{total number of all observations (safe + unsafe)}} \times 100$$

The baseline measure provides:

- An assessment of the extent of the problem
- The level at which safe / unsafe behaviour is occurring under present conditions (and prior to any intervention)

### Analysis

Analysis is concerned with understanding why the problem exists and therefore what might be done to change it. There are a number of tools that can be used here:

- Interview and observation
- Use of fishbone (cause and effect) diagrams / root cause analysis
- Brainstorming
- Error analysis
- ABC analysis

Error analysis is concerned with errors / mistakes whereas ABC analysis is more concerned with violations.

**Error analysis** is concerned with identifying the environmental factors that increase the chances of a slip, a lapse or a mistake. The focus of this analysis is on understanding the cognitive / information processing limitations that can be source of an error based unsafe act.

**ABC analysis** is more concerned with understanding the motives that influence decision-making. It involves a consideration of the different antecedents and consequences that operate in the context of the behaviour and an attempt to understand those that are the most salient. From such an analysis, and using reinforcement theory, the aim is to identify what might be changed within the context that the behaviour operates to create the potential for change.

This might involve:

- an adjustment to the existing antecedents to increase their effectiveness
- the removal of negative consequences associated with the safe behaviour
- or the introduction of positive consequences so as to make the safe behaviour more attractive

Whatever the techniques used during the behavioural analysis stage, the requirement is the development of an action plan for implementation. This is often referred to as the intervention.

### Design of the change strategy and implementation

This stage is critical to the process as it involves identifying the drivers that will create the behaviour to change. The change strategy or action plan may involve a range of different interventions. The aim of the action plan will always be to make the choice of the safe behaviour a more reliable, easier and more attractive proposition. This can be achieved through altering the conditions within which the behaviour currently occurs, providing training, coaching and recognition, demonstrations etc. However, given that choice of behaviour is often about motivation, it is likely that there will also be a need to consider dealing with this issue as well.

### Goal setting and reinforcement

Tackling the motivation issue is provided in the form of setting performance goals (eg achieving a %safe value or achieving consecutive performance at or above a %safe level) and providing some form of reinforcement when these goals are achieved. In this context, reinforcement refers to anything that is likely to focus people's effort – something they value. This is likely to include a significant emphasis on social reinforcement – recognition and praise. It might also include something more tangible

and of direct benefit to the team (eg prolonged and special lunch break) or to others (eg charity donations).

Reinforcement is a tricky area that usually attracts some emotional reaction when discussed. It needs very careful handling but when used appropriately can be effective in motivating effort and achievement and can create a sense of fun in the workplace particularly when people become more imaginative with respect to the selection and use of reinforcers.

In effect, goal setting and reinforcement represent part of the change strategy. In considering the content of the change strategy the emphasis should be on *minimal intervention* – doing just enough to create a change in behaviour.

### Measurement and feedback

Measurement provides the data through which the effect of the change strategy is assessed. The measurement process is often performed through observation and is as described in the section on baseline measurement above. A further issue that needs some mention is the number of observations. The requirement here is to achieve a sufficient sample so as to provide a valid assessment of the incidence of the targeted behaviour. The number of observations required will depend to some extent on how often the behaviour occurs. The data is used to produce a %safe score as often as possible. The principle here is the more immediate the feedback, the stronger the effect it has on reinforcing the effort that has been put in to achieve change.

### Review and adjustment

Formal reviews of progress should take place on a regular basis. The focus is on the extent to which progress is being made and problem solving if this is insufficient. As a result of this process, adjustments might be made to the change strategy.

## Moving on

The aim of the process is to produce behaviour change that is sustained at a high level – 100% safe if the behaviour is deemed safety critical. This is achieved through the process regular practise of the desired behaviour, which leads to what is referred to as over-learning. Over-learning produces automatic or habitual behaviour – behaviour that is always safe irrespective of the conditions or context. In measurement terms, this state exists when the observation data is consistent at 100% safe over a period of about 3-4 weeks. When this is achieved, success could be celebrated to mark and reinforce the achievement before a new behaviour is selected to replace the one that has been brought to habit level. The process is thus a continuous one.

# Behaviour Change Processes

The development of different approaches to behaviour change in the context of safety is something that is evident from the different processes that have been adopted. All of these, however, have their roots in the general principles of ABA and behaviour modification, although the extent to which they have adhered to the fundamentals varies.

## Logic Behind Behavioural Safety Processes

Behavioural safety typically is synonymous with some form of ***observation*** process in which the employees are involved – either in the form of their supervisors observing workforce behaviours or peer on peer observations. The logic behind this is that observation followed by a ***coaching conversation*** will bring about a change in behaviour. This may have some merit in some cases, but it should not be regarded as a panacea. There are many examples in our experience in which such conversations do not generate in us increased effort and behaviour change. We are all quite capable of ignoring or not heeding what has been said to us even when this is positioned sensitively.

An approach that just features an emphasis on observation and coaching tends to represent the problem behaviour as a function of the person being observed. For example, the tendency can be for explanations to be couched in terms of individual inadequacy. This does not take into account the fact that there are all sorts of reasons why people choose certain behaviours. The tendency to seek to explain cause and effect as a function of the person performing the act is a typical human reaction. However, research tells us that in most cases the better explanation will be found in the wider system or context within which the behaviour has occurred. This phenomenon has been the subject of considerable research – the area of study is called ***attribution theory***.

A more robust approach would thus seek to uncover deeper explanations and to focus on fixing these. This is often represented in behavioural safety processes by recording observations, collecting and collating the data, and the subsequent ***trending and analysis*** of the data with a view to identifying required corrective actions (a second level of intervention). These corrective actions are likely to include changes to the context in which people behave recognising the important part the context can play in influencing choice of behaviour.

Most behavioural safety observation processes include an emphasis both on the coaching and more general corrective actions that flow from the trending activity. The reality however is often quite different in that the second level of intervention (often potentially more significant) typically is given much less emphasis. The important inference from this is to ensure that any behavioural safety process is seen as a whole and to avoid introducing selective parts. The problem is that an observation / coaching process has good face validity in the eyes of many people although deeper analysis will show that it probably has limited potential to create deep down behaviour change.

## Types Of Behavioural Safety Process

As noted above, most if not all behavioural safety processes are presented as being approaches to ***behaviour modification***. Typically, they are designed around an emphasis on ***positive reinforcement*** (from Reinforcement Theory) and may include other theoretical propositions such as ***transactional analysis*** and ***goal theory***.

Although there are a variety of providers of behavioural safety processes, there are three main approaches that can be distinguished:

- Observation and coaching using a proprietary / generic checklist, recording, trending and second level intervention.

- Observation and coaching using a custom made checklist derived from an assessment of worksite behaviour, recording, trending and second level intervention (using statistical process control / quality assurance type techniques).
- Observation of a few workforce selected behaviours, preceded by baseline recording of compliance levels, behavioural analysis and change planning. The focus here is more intensive, directed at a few behaviours at a time, the aim being to create safe habits.

The first two are more widely known whereas the third is more closely aligned with ABA / behaviour modification fundamentals that we have previously described.

### Generic Checklist

Observers are trained in the use of a standard checklist, observation techniques and coaching. The emphasis is on observing both safe and unsafe behaviours – the aim is to record at least as many "commendations" as "corrective conversations". Observations can be the result of planned tours or incidental experiences of behaviours being performed. Observations are recorded using the proprietary card, where categories of behaviours are checked against so representing the target of the observation. Cards are handed in and collated. Trends are identified and actions identified to tackle these when considered appropriate.

### Assessment Based Checklist

Consultants carry out an assessment of the organisation, identify "critical behaviours" and from this produce a custom-made checklist. A cross-representational steering team is formed and undergo training in the process including the application of problem solving techniques. The steering team train observers in the observation and "positive reinforcement" process. Observers conduct special tours - a single

observation can take more than a few minutes to carry out. Observations are recorded and collated. A ***%safe*** statistic is calculated for each of the critical behaviours (eg at the end of each month) and the data made available to the workforce. The data is reviewed by the steering team who may select specific behaviours and using a variety of problem solving techniques identify a plan to bring about change in that behaviour. The effect of the plan is reviewed through considering the data produced by subsequent observation records.

### Workforce Selected Behaviours

Workforce delegates are trained in what is an effect an ***applied behavioural analysis*** process. Using a variety of data sources, the workforce team select a few behaviours to focus on (3-4 maximum). Initial observations are carried out to determine the baseline %safe. A change plan is then produced using behavioural analysis, the aim of which is to make the selected behaviours easier / less onerous to perform, and implemented. Ideally all members of the workforce then carry out very simple observations as part of their normal working duties. The aim is to obtain a true picture of compliance across the whole workforce team. The process is therefore team-based rather than individually focused. Targets and reinforcements can be set to focus effort. Feedback is produced as often as possible, with regular reviews to discuss progress. When the existing behaviours have been improved (ideally to a level of 100% sustained compliance) new behaviours are introduced. The management is included in the process – their role is to support and encourage.

## Critique

The above processes vary in their approach to the problem of behaviour change.

- The first two are more generally directed (checklists with as many as 25 behaviours) whereas the last discussed is much more focused (3-4 behaviours maximum).

- The first is more directed at the individual, the second has a focus on both the individual and team performance, whereas the last is largely team-based.
- The first and third can involve the entire workforce, whereas the second is more directed at training a number of specialists.
- All involve observation activity, with an observation taking between 10-15 minutes in the first approach, more than this in the second, and perhaps only a few seconds in the last.
- Success criteria in the first is measured typically in terms of the level of activity and the reduced incidence of observations of unsafe behaviours by category. The second approach produces a %safe statistic for each behaviour in the checklist (data typically is aggregated over a period as observations tend to be more intensive) as does the third approach for each behaviour being tackled (although calculation of %safe can be daily with a much higher number of simple observations being carried out).
- Most emphasis is placed on the feedback / coaching conversation in the first and second to achieve change, whereas in the third the change plan is seen to be the key.

The above represent some key comparisons based on our experiences. They are generalities – specific applications of behavioural safety processes may differ in how they are managed and operate. For those selecting a process however, it is worth exploring the relative merits of the different approaches in the context of your organisation and with respect to what it is you are trying to achieve. (At the end of this document, we have included a number of statements extracted from a study performed on behalf of the Health and Safety Executive reviewing behavioural safety observation processes).

## Evaluation

This is critical but often given only scant attention. Any process should be seen to deliver value in terms of a reduction in the risk levels associated with how people behave. This should in turn lead to greater risk assurance and over time should be expected to lead to reduced number of incidents. Too often however, evaluation when it is produced to justify time and resources is given in terms of level of activity and favourable responses. Being seen to do something is not the same as making a difference and in such cases this type of evaluation is of little value. Any organisation implementing a process ought to build-in to the implementation of the process the means assess the value being added in terms of changes in safety critical behaviours and a reduction in risk.

# Team-Based Improvement

The synergistic effects of teamwork have been well established. Team members working well together outperform individuals working on their own. In safety, the importance of this is strengthened in that safety necessarily is an interdependent activity. And yet, an emphasis on teamwork is something that does not strongly feature in many approaches to behavioural safety where the main emphasis often is on improving an individual's behaviour.

A significant issue with respect to developing greater engagement relates to giving people a sense of purpose and feelings that they can make a difference. In many organisations, this sense of purpose becomes diffuse because of the emphasis on outcome measures as the key business metric. Such measures (accidents and incidents) may have meaning at organisation level but have much less meaning for people locally when the occurrence of them is typically few and far between. In the context of the safety effort, when performance measures have low meaning this can result in what has become termed ***social loafing*** – a phenomenon in which team members turn in low levels of effort because the contribution they make to performance is less easily evident and they therefore feel less involved or exposed. This is a phenomenon that exists when teams are large and the goals and measures have low local significance. To achieve higher levels of engagement the need therefore is to create greater emphasis on a local purpose, goals and measures.

Research has reinforced the strength of the team in delivering improved performance. However, to achieve this there are a number of key requirements:

- The size of the team should allow for a degree of intimacy and regular contact – this is best achieved when teams are small (6-7 members).

- The team should have clear goals and the ability to achieve these, including an acceptance of the goals and some say as to how they will go about achieving them
- There should be regular and specific performance feedback in relation to progress
- The opportunity for regular meetings to assess progress needs to exist

The focus on a small team approach, in which the teams have the ability to make decisions about their behaviour but who are held accountable for their performance, seems to present a significant opportunity for those wanting to improve their safety culture and performance. The aim is to create the conditions in which the emphasis is on high-performing safety teams as the key unit and driver of safety. This is in contrast to a model, which places more emphasis on central control and prescription.

What the above suggests is an approach to safety improvement that is localised. The process may be the same across the organisation, but the goals and measures ought to have high levels of meaning locally so as to generate interest and effort. The behavioural safety processes described above are likely to add greater value if they have local significance. The development of local team-based safety improvement plans, with significant input from the team members in identifying the improvements to be tackled, is a strategy that should increase the chances of greater employee involvement and engagement.

# Other Strategies

In the above the focus has been mainly on behavioural safety processes. However, we should not forget other means of achieving greater workforce involvement and active participation. Below are some features that exist or have been tried in many organisations, all of which can make a significant contribution:

**Safety suggestion schemes:** need to be well managed if they are to be seen as "worth the effort" by the workforce. This means rapid and specific feedback when suggestions are made, followed by action when this is possible and appropriate or discussion when this is not the case.

**Safety Representatives:** challenge is to ensure that the role is perceived as one that has status and is able to make an impact both to SHE activity and strategy.

**Safety Committees:** pertinent issues here are similar to those above.

**Project Teams:** involvement of the workforce in specific SHE improvement projects working as part of a cross-representational team. This can be large scale but it also could be applied to day-by-day operational issues such as the conducting of risk assessments and producing method statements.

**Upward feedback:** introducing an emphasis on upward feedback that values the views of the workforce in the strength of safety management and safety leadership. When done, this can send out a very powerful message regarding management responsibility.

**Safety climate surveys:** provide a measure of how people feel about the management of SHE. The perception of their value depends on how the issues identified are dealt with.

# Health & Safety Executive Conclusions

The HSE has commissioned a number of research papers with respect to the implementation of a behavioural safety process. Some of the conclusions from this research are as follows:

**Key success factors:**

- ***Workforce involvement***: making the decision to implement a behaviour change programme, selecting the process and adjusting it to meet the own needs.
- ***Management commitment***: for example by ensuring that the workforce is given the time and support to be involved in the programme from the outset.

**Difficulties / barriers to success:**

- Organisation not ready for the type of programme introduced – eg hearts and minds of the workforce not sufficiently developed
- Workforce not involved at early enough stage in the implementation.

**Important issues to focus on:**

- Winning hearts and minds. An organisation's 'readiness' for change, and the way it selects and implements a tool are more important than the specific tool that is used.
- Much of the benefit comes from the engagement process in identifying goals, setting targets, working to achieve them and the measuring and feeding back of performance. The programme selected is a vehicle to assist these processes.
- Behaviour modification programmes should not focus exclusively on the behaviour of the individuals in the workplace. They must also consider the interactions with the 'job' and the 'organisation'.

- The success of a programme aimed at frontline employees requires a pre-existing level of trust between managers and the frontline staff.
- A tool that is successful at one site may fail when used elsewhere.
- It is important to avoid unrealistic expectations for early reductions in accident statistics.
- Setting quotas for the number of observation cards submitted is likely to be counter productive. There is a danger that the programme becomes discredited as no more than a 'numbers game'.

# Contact Us

Should you wish to learn more about how we can help your company to improve its safety performance then we would be delighted to hear from you.

You can contact us by e-mail or by phone as follows:

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