



Behavioural Safety - The Current Position

ARTICLE No 9

This paper attempts to summarise the current world-wide position regarding behavioural safety. It draws on current publications, interviews with key individuals and the findings of the recent US conference on Behavioural Safety. This is perhaps the most important conference on the subject to date since all the major Behavioural Safety names in the United States were in attendance - and the US are some years ahead of us in terms of numbers of active sites. Perhaps the first issue to discuss - before we adopt an analytical and critical perspective - are the latest aggregated levels of accident improvement. They underline that it is important that organisations see Behavioural as a long term process - not as a short term programme.

Benefits. The most recent evidence suggests that the yearly reduction in accident rates is 34%, 44%, 61% and 71% (Krause, 1997). In other words significant gains are still being made in the fourth year of implementation. Clearly, therefore, an organisation would be unwise to feel that they had successfully done a behavioural programme after just two years. (It is of course important that we begin to collate this sort of information in the UK - and this is one of the aims of the user-conference this paper was prepared for). As Krause suggests - whether or not behavioural safety works is now a non question. It does. The question is why are some organisations unable to make it work for them?.

Issues and Criticisms. One key issue discussed at the US conference also reflects discussion within UK organisations and is worth detailed consideration. In addition we'd like to address the criticism that an organisation should focus on organisation factors only.

Issue 1 - Is the Organisation Ready for a BSI?

- The US practitioner Peterson is quoted by Manuele (1998) as saying that readiness is critical - if the company is not ready the effort will fail with not ready being defined as no management support, engineering not complete, accountability not established, job design, training and defences not complete. In contrast, Geller (another senior US practitioner) is quoted as saying 'all organisations are ready'.
- We'd argue strongly that 'management support' does not really belong on Peterson's list and that it isn't a 'readiness' factor at all - but an essential element of any BSI. Without a suitable level of management commitment an organisation would be ill advised to undertake a BSI at all- regardless of other factors. (See Marsh, et al 1998 Journal of IOSH).
- Weighing up all opinions expressed at the conference Manuele concludes that:-
"it is sound to suggest that engineering, management systems, training and the undertaking of redesign at work be at a superior level before a behaviour based initiative is undertaken".

We feel this 'sensible' conclusion is accurate as far as it goes - but rather sits on the fence and lacks subtlety and understanding. Broadly, we agree with Geller that any organisation can benefit - but stressing that a high level of management commitment is imperative.

If the organisation is as close to 'perfect' in its systems and procedures as can be achieved without front line validation - then a BSI will certainly be easier to implement. In this case its most obvious use is to allow fine tuning of systems, a warning procedure for when changes over time are made - as well as genuine opportunity for workforce ownership of the safety process.

However, if the systems themselves still need a lot of work then a BSI can help direct the necessary change. For us the principle of measuring the extent of the problem (and any subsequent improvement) is equally valid in both "good" and "bad" cases - as is the opportunity for genuine workforce involvement. What is likely to change is the amount and fundamental importance level of critical information generated. We'd argue that if the MD's resolve is sufficient then a BSI can help the organisation more quickly reach the position where the timid US delegates would say "they're now ready for a BSI". Krause himself says that "using behavioural

data to guide systems improvements is the difference between a temporary programme and an (on-going) process". Essentially, we'd argue that this remains true regardless of the state of the systems initially.

That said, two other factors do need consideration however. First, resources - if you really can't do everything at once it must be best to start with a systems approach. (Though see 'a compromise' below). Second, the credibility of 'yet another initiative'. Clearly a 'really bloody' BSI is more likely to fail - making a 'we tried this before and it didn't work' lack of credibility problem (some time in the future) more likely.

Issue 2 - The Organisation Simply Shouldn't Ever Bother (Systems Theorists & Other Critics)

- Some public criticisms of behavioural safety are just silly or entirely theoretical. An article in the January '99 edition of the Health & Safety Practitioner argues that all consultants who are trying to 'improve culture' are merely management 'lackeys' and that the only way to ensure workplace safety is through strong unions. (BSI's weren't directly attacked by the Back & Woolfson's article. However). Whilst coherently argued, however, (previous research suggests that they do have a point) the article said nothing about what might be done in practical terms between now and the election of an 'Old Labour' government.
- Also in the Health & Safety Practitioner (in 1996) an 'R.Gilby' simply dismissed BSI as "mind games and manipulation" and helpfully called for the development of a 'better safety culture' founded on communications based on mutual trustee. (Among a number of hugely ill-founded criticisms it was the one solution suggested). This was either a hugely under researched piece or was possibly a provocative plant to generate correspondence by the editor herself! (Like Freddie Starr and the Hamster, however, it obtained a measure of credibility simply because someone saw fit to print it). Suffice to say a practical strategy as to how the better safety culture might be developed was not detailed.

However, the most valid "criticisms" of the behavioural approach are that of systems specialists such as James Reason (Reason, 1997). Observations such as his do require more detailed consideration. His position is not that BSI's are wrong - but that resources are better targeted elsewhere. (The 'faint praise' of "well I don't suppose they do any harm" is apparent). For him unsafe acts are the consequence of a number of core general Failure Types which have organisational causes. An underpinning principle is that people are really difficult to change - but organisations are changeable and his basic position is well illustrated by the following analogy:-

"The best way to deal with mosquitoes is not to kill them one by one but to drain the swamp".

For him the "person (based) approaches have shown themselves to be valuable" in some circumstances but managers fail to recognise the bigger picture:-

"When all you possess is a hammer almost everything looks like a nail - or, more directly, when the 'person model' is the only approach you feel comfortable with then every problem appears to be a person problem".

In other words, many organisations, trainers and BSI providers themselves are guilty of the Fundamental Attribution Error we so often discuss. (i.e. that when something goes wrong we automatically blame the person - when it's actually organisational factors that are at fault). Therefore, organisations should focus less on "person" models of accident prevention but more on "organisational" models.

BSI Fits the Systems Best Practise Model

All this is difficult to disagree with. However, Professor Reason also suggests that "anyone who feels they have a good safety culture 'is almost certainly mistaken" it's something that must always be 'striven for'. Here, we feel he (too) is guilty of saying rather than doing. Particularly, we'd argue strongly that a behavioural approach is not just helpful but essential to this on-going process of continuous improvement.

To illustrate the point it is helpful to consider Professor Reason's description of a good 'safety culture':

- it is one that strives to maximise safety regardless of commercial concerns and remembers that the only way to ensure 'zero accidents' is to close the factory.
- characterised by communications founded on 'mutual trust' - and communications of a face-to-face nature whenever possible.
- that doesn't punish those who make errors (errors by definition are unintentional) but seeks to understand and remove the causes of those errors.

and...

- that effectively punishes violators. (With these last two points combining to provide a 'just culture' that will help maximise honest reporting).
- that retains a respectful wariness where accidents are infrequent by collecting the 'right kind of data' (data that proactively checks the systems 'vital signs' i.e. at the General Failure Type indicator level among others).
- that has the willing participation of the workforce.
- that has 'flexibility'. (Flexibility in this case comprising a solid foundation from which individuals can innovate at appropriate times (i.e. when they genuinely know best) - and also being able to move to a 'flat structure' where 'those on the spot' can have authority when appropriate).
- that has a learning focus. (I.E. the willingness to listen, learn and actually act when appropriate).

We don't disagree with any of these elements - but argue, strongly, that an effective BSI will not hinder the development of such a culture at the very least. (The justification for using a BSI to help achieve all of these elements are obvious). For example, a rolling programme of setting hard but realistic goals with full workforce participation gives an excellent focus for a company wide process of continuous improvement. In addition, for three issues at least, a BSI can be argued to be an essential and additional tool.

Problems of Ownership. The Tripod system (that Prof. Reason developed for Shell), for example, has a degree of involvement in that representatives of the workforce are consulted about the critical indicators of the various 'General Failure Types' when they are developed. But these are only measured every three months and then not by the workforce. Evidence suggests that even the 'DuPont' behavioural approach - which in some organisations does have members of the workforce 'auditing' the site on a daily basis - does not deliver genuine ownership as an effective audit needs a breadth of knowledge and experience that very few possess. We argue that only a process that is genuinely run by a meaningful number and cross-section of the workforce can deliver genuine feelings of ownership. (At a recent 'employee led safety' conference in London a Steering Committee member from Shell's Cormorant Alpha platform started his talk with the observation that he was 'the only employee in the room').

Problems of Systems Validation. Audits, and incident investigations provide a great deal of essential information but are nowhere near as subtle as daily peer-to-peer observations and conversations. (Do they really allow you to know exactly what is happening and why on a day-to-day basis?). We argue that even the most intelligently written system in the world needs checking in the middle of the night/ a busy shift. In addition, even the most pro-active management approach (based on risk factors identified from elsewhere in the organisation - or even other industries) cannot tell you everything about the risks specific to all corners of your particular organisation. Basically, the most intelligent and well read manager/ safety officer in the world can never say "Ah, I've seen this before" - because the answer is always "well yes and no". (For the most part) BSIs are trying to prevent individuals having accidents - and each individual is different. As one of the user-conferences key speakers, Professor Brian Toft puts it in his much published paper on risk management 'technical aspects of a disaster are important - but those aspects that relate to management, information and personnel are equally so'. (Author's italics).

Systems theorists do preach the pro-active mantra. However, any safety system that does not maximise ownership as well as such as key indicator measurement and open communication - on a daily basis - runs a great risk of something having to go wrong before its noticed and actioned. Does a system such as Tripod really deliver this?

In summary, what we're saying is:- a comprehensive safety system that does not include a workforce owned BSI hasn't enough focus on the day to day issues and isn't likely to be 'owned' by the workforce in any meaningful way.

Summary - Strategic Use of Elements of a BSI?

Perhaps an organisation that has lots of work to do on its systems and genuinely can't do 'everything at once' no matter how great its resolve should use the qualitative aspect of a BSI first. They might get some volunteers trained in the basic mechanics of behaviour identification and objective analysis and set them loose - identifying which behaviours are putting operatives at risk and, of-course, why - with this data used to identify organisational causes of 'general failure types'. (Not taking measurements at all at this point- so not looking to develop a measure, collect base-line data or goal-set). Their findings can now be fed into the on-going systems development/ improvement programme. Indeed, the principle is hardly new - many design teams already use an element of behaviourism during the design stage - then use it again later to validate the equipment's use in action.

In other words we feel whatever their current circumstances organisations should seek to maximise workforce ownership, involvement and objective understanding of safety. Behavioural safety is an excellent way of working towards these.

Behavioural Safety in the UK - the Future

The University of Manchester Institute of Science and Technology (UK) recently invited a number of representative bodies (for example the HSE, the Trades Union Congress and the Institute of Occupational Safety and Health) to discuss the setting up of specific standards of implementation of a behavioural safety programme. (Unfortunately the response was poor). The idea is that once a forum is properly established all major providers of behavioural safety Consultancy would be invited to contribute.

It was suggested standards focus on:-

- level of genuine workforce ownership and participation
- accuracy of behavioural measurements
- effectiveness of the feedback and communication systems
- level of management support and response

As the field grows it is important that organisations claiming to have implemented a behavioural programme have actually implemented the main elements of the process correctly. (Though it is, of-course, important to remember that there is no such thing as universal best practise - so standards must allow organisations to innovate and tailor whilst sticking within inviolate principles).

However, bench-markable standards for the various stages and elements of the process will prevent organisations claiming "we tried that behavioural safety - but it didn't work" when they should be saying "we were unable to properly implement a behavioural programme". In a recent paper Krause (1997) suggests that behavioural safety in America is in danger of following in the footsteps of Total Quality Management - where the "we tried it but it didn't work here" comment has been said often enough for "Total Quality doesn't work in practise" to have become 'received wisdom'.

Though currently increasing in popularity at a substantial rate in the UK not enough organisations have yet implemented a behavioural programme for this to have happened here - yet. The proposed forum is a pro-active attempt to prevent such an inaccurate perception developing in the UK. It must be remembered that implementing a successful behavioural process isn't easy to do and it certainly isn't a 'magic pill' or panacea. As Dan Peterson has pointed out "no one ever bought safety excellence".

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