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Worker safety skill training– Foundation for a sustainable safe workplace

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ABSTRACT

This study focuses on the importance of safety at workplace and OHS (Occupational Health & Safety) practices. It discusses the rationale behind why worker safety training is important for a safety management system, the existing challenges and the possible solutions and action points to overcome them. It also discusses the different means of people engagement in safety management both at a conceptual level as well as its actual implementation. Various facets of safe work culture have been examined through data analysis of nine elements of the Job Satisfaction Survey (JSS) which shows an interesting result. It depicts that supervision satisfaction and present work satisfaction of the workers have a direct correlation with the safety performance. The purpose is to empower the base of the pyramid where workers are exposed to real hazards.

Keywords— Workers training, Safety training, OHS

1. INTRODUCTION

Occupational Health & Safety (OHS) is an essential component in any business/ organization/industry today - be it from loss prevention angle or as a cutting edge on sustainability.

A safe workplace is a major concern for today's industry. Most of the times, industries keep working on the development of systems & processes and invest in infrastructure, machinery, etc. These are all important to develop a mature safety system. But, this is not enough! These are all 'HARDWARE' (machinery, infrastructure), 'SOFTWARE' (procedures, SOPs, system), but what next? The 'HUMANWARE' aspect of the system needs to be focused on to ensure long-time sustainability of the safety system. Even if the hardware of safety is robust, it has its own limitations having huge resource requirement. On the other side, software like procedures, protocols do not cost much, are easy to develop but again it is user-dependent. Therefore, the effectiveness of health and safety depends on HUMANWARE which is neglected at the bottom of the pyramid where the workers are exposed to the real hazards.

According to a report by the International Labour Organisation (ILO), China & India alone contributes to 37% of the total fatal occupational injuries as compared to the 5% by the developed market economies. With respect to Lost Time Injuries, 36% are contributed by China and India alone as compared to the 4.5% by the developed market economies. Also, the official statistics suggest that there were more than 4000 documented fatalities in the Indian factories which is quite a high figure. Analysts say that even by the most conservative estimate, the actual numbers could be at least ten times higher if the accidents in the unorganized manufacturing sector are counted.

So, the main priority for everyone at work should be to prevent accidents and ill health caused by work. The ultimate goal is to establish a safe & sustainable work culture. For that, organizations use various types of safety training to incorporate safety into the workplace culture. These training not only introduces the workers to the risks & hazards related to their work but also gives them the required knowledge & insight to deal with different situations due to change of job or working conditions. Lack of understanding of safety practices related to the job will keep the worker at a higher risk for workplace injury, illness or death.

The organizations should have a proactive approach rather than a reactive approach. Because the reactive approach only focuses almost exclusively on accident rates as a measure of safety performance whereas the proactive approach helps to keep a regular focus on the actual safety behaviour. This allows to identify & deal with other safety-related issues in the accident casual chain before an incident occurs.

Companies adopting this approach are usually rewarded by fewer accidents, consistent safety management, better communications and greater involvement in teamwork, all of which can exert beneficial effects on production-related issues and the bottom line of profitability.

2. WHY STAFF/WORKER TRAINING IS IMPORTANT FOR A SAFETY MANAGEMENT SYSTEM

Sometimes employees/workers take shortcuts, actively encouraged & reinforced by line managers for the sake of production. This leads to negative effects which are apparent, not immediately but gradually. The employees learn that behaviour pays. Besides, the company suffers from wasting resources as the very behaviour that companies spend a lot of time, money and effort trying to eradicate, are reinforced. Moreover, by allowing such unsafe behaviours, line managers are transmitting conflicting messages that undermine employee's confidence in the whole of management's commitment to safety.

To instill the safety culture among the employees/workers, the management needs to plug in the workers' safety training needs within the system. This would act as an instrument of positive reinforcement.

When employees join a new workplace, they should be given an immediate sense that the company places a high priority on safety. This should be ingrained in the culture as a whole. One way to do this is to have everyone, from low-wage workers to senior executives, show public support for and knowledge of safety programmes. Detailed policies and procedures should be laid out by the company for the employees to learn about safety training.

Safety-oriented organizations learn from accidents and illnesses that affect workers' health. They study each incident, then, make any necessary changes to policies and procedures to prevent similar accidents or illnesses in the future. Part of this process falls to the head safety officer. He oversees the collection of incident data and reviews it with the assistance of an interdisciplinary team. Executive leaders delegate the development of better safety training to explain revised policies and procedures to managers. These managers ensure that updated safety training programmes clearly explain changes to policies and procedures to the affected workers.

Providing health & safety information and training helps to:

- Ensure that employees are not injured or made ill by the work they do
- Develop a positive health & safety culture, where safe & healthy working becomes second nature to everyone
- Find out how to manage health & safety better
- Meet legal duty to protect the health & safety of employees

So, health & safety for workers, staffs should be developed with the background of organizational context.

3. CHALLENGES - HIGHER LOSS EXPOSURE

In industry, many of the time's worker training is being considered as a routine activity and much thought process do not go into it traditionally. In a few cases, it becomes a number game that is the focus is more on a number of people being trained rather than the quality of training programme. In fact, there are many other situations listed below which lead to higher loss exposure for an organization.

- a. Managing human ware is the biggest challenge faced by the industry to manage an effective safety system. People have different behavioural and attitudinal factors which contribute largely in the safety. Behaviour has different dimensions out of which we have identified two important factors Job Satisfaction and Job Stress. In this paper, we tried to show the correlation between job satisfaction and health & safety.
- b. Workers do face the hazards directly and they are the one who is exposed directly to the hazards.
- c. Many times, in developing countries, the literacy level is low.
- d. The socio-economic condition does not support the safe working conditions.
- e. The pressure of productivity poses a serious challenge to the safe working environment.
- f. Resource constraint from the management part.
- g. The conventional attitude of not involving workforce in the planning and designing of OHS programs. Many times, the workforces are disengaged in the planning part; even in the case of hazard identification. As a result, the education and awareness programmes appear to them as unnecessary and a burden beyond their day-to-day activity. Sometimes it is seen as counterproductive, so it seems to be a threat to the earning opportunities.
- h. Due to change in industrial and socio-economic scenario, the migration of the workforce, as well as the use of contractor workmen, have increased.
- i. Lack of structured focus on workforce training.
- j. Ignoring the behavioural aspects while designing the workforce awareness & education programme.

4. HOW CAN WE SOLVE THE ISSUE - THE PRINCIPLES BEHIND THE ACTIONS

We looked at the solution to this problem of worker safety training from two perspectives - principles behind the actions and action points.

Understanding the theoretical background of the action points is very critical because it provides the backbone of the activities we do to train our workforce. Let's understand the principles first.

4.1 The workplace learning context model – The balancing act between need and resources

To design and deliver an efficient training program, it's important to understand the context of the training need. Consultivo has developed an effective, multi-faceted workplace learning context model that incorporates to improve the quality of training needs identification.

Each work activity in a workplace requires certain OHS competences in terms of education/knowledge, experience, and attitude. When we identify the OHS competence criteria as a starting point of training need identification, a very important aspect to be

considered as a learning context. As per this workplace learning context model, each work activity related competence has got two sides of it. One is the balance between the source of constraints vs. resources and another is the OHS requirement vs. productivity. The source of constraints may be defined as people non-cooperative attitude, adverse safety climate, lack of leadership support, lack of motivation, literacy level etc. Availability of fund, expertise etc can be considered as resources. The bottom part of the work activity is occupational health & safety. Here, occupational health & safety requirements like control of speed, use of PPE, limited working hour, etc can be considered as counterproductive in the short term.

So, an organization needs to consider these elements mentioned above and create a balance which can be considered as the basis of any training need assessment. This model can be termed as 'workplace learning context model'.



Fig. 1: Workplace learning context model

4.2 Learning/training methods

There are several methods being used across the globe for worker training regarding workplace safety. Few of them worth mentioning are based on Active Student Learning, Contextual Teaching Learning, and Cooperative Learning, Competency-Based Education/Training.

In practice, the following methods are being used in isolation or in combination.

- **Classical Classroom Training:** This is very important to communicate the fundamentals & theories. General collaborative learning methodologies are being used through group assignment and classroom discussions
- **Onsite Training:** Training on working site and working environment
- **Technology-supported Training:** There are several examples where the classical learning methods (visual, auditory, kinesthetic) are being used with the aid of technology like animation, simulation, audio-visual aids, gaming, quizzing etc. Most of the time, they are classified as e-learning.

When they are used in combination, it is a Blended Learning Technique (BLT) and researches found this BLT very effective in terms of engagement, understanding, and retention of the subject.

4.3 HUMANWARE – The behaviour and attitude of the people who are exposed to risk

Once we talk about the solutions for the development of the safe workforce, behaviour-based safety is, of course, the ultimate journey.

Everybody who works to reduce accidents and improve safety performance is concerned with human behaviour. Behavioural safety shares a concern with human behaviour and safe performance in the workplace with other approaches. Behavioural safety is the application of behavioural research on human performance to the problems of safety in the workplace. This means that any safety programme labeling itself as a behavioural safety programme must meet the standards of the behaviour analytic research as practices are applied in the workplace.

4.3.1 How does it work?

Behaviour analysis is the science of behaviour change. Applied behaviour analysis is the application of the science of behaviour change to real-world problems, such as safety performance. While doing this, one should look for functional or systematic relationships between

- Environmental changes, i.e. the stimuli or cues that lead to behaviour
- The behaviour itself, such as specific areas of work performance
- And the consequences of behaviour, i.e., the positive or negative responses that occur immediately after a person performs a particular work task.

Applied behaviour analysis applies the lessons learned in laboratory research to the challenges of human behaviour in everyday life. In this case, it applies to the challenge of building safe practices in the workplace.

To do this, sound behavioural safety programmes include the following basic steps:

i. Behaviourally-specific desirable performance

For example, if we want to improve safe practices in a certain workplace, we first specify as behaviourally as possible, those practices. For example, correct forklift operation or lifting behaviour. Or, we may specify the outcomes that are achieved if safe practices are performed. For example, a shop floor that is free of hazards such as wires or oil slicks that could trip an employee and cause a fall. The process of specifying these criteria for good performance results in a measuring instrument that can be used to periodically sample safety performance in the workplace and measure human performance.

ii. Measure safety performance

Using the criteria for safe workplace performance, we periodically sample and measure safety performance against those criteria. These measurements are recorded and become part of a database; a cumulative log of performance for each workplace.

iii. Shape safe performance through feedback and other consequences

Behavioural research on learning teaches us powerful lessons about how to teach and build performance improvement. First among these lessons is the power of consequences. Consequences of shape performance. One very powerful consequence is feedback on workplace performance. Properly designed and used, performance feedback will produce learning and positive performance changes - often very dramatically. As a practical matter, once measurement takes place, a sound behavioural safety programme will provide timely, usually immediate, feedback on workplace safety behaviour to the employees whose workplace is being observed. It will not be delayed for lengthy periods of time. In addition, the feedback will focus on the positive gains in the performance, not the negative performance decrements. It will be predictable and certain. And, it will be delivered in ways that are meaningful to the people who are receiving it. The posting of graphs of the performance of work teams or departments in building safe performance over time is another form of feedback that set the occasion for coaching and feedback on workplace safety performance. As teams and departments improve in achieving high levels of safe practices in the workplace, celebrations are often held, further acknowledging and reinforcing safe performance.

4.3.2 Application

The application of behavioural research to the solution of human problems is building and demonstrating the first effective and reliable technology of behaviour change in the human history. No other field of psychology or the behavioural sciences has been able to do this successfully.

In workplaces with troublesome rates of unsafe performance, behavioural safety programmes, properly implemented, produce significant improvement in safety performance and major reductions in workplace injuries & illnesses. Human suffering & financial costs are sharply reduced. Moreover, the costs of producing these gains in human performance are a good investment, paying for them many times over.

This research work aims to find out whether the behaviour of employee really affects occupational safety or not and the reasons behind it. There are many intrinsic & extrinsic factors which affect behaviour. The researcher has considered a few behavioural factors which affect safety to conduct this study. **Job satisfaction** is simply how people feel about their jobs. It is the extent to which people like (satisfaction) or dislike (dissatisfaction) their jobs. Job satisfaction can also be a reflection of good treatment and an indicator of emotional well-being. It can lead to behaviour that affects occupational safety. Another factor is **occupational stress**. An employee can suffer from stress regardless of age, working condition, status etc. It is important that line managers, HR personnel, safety officers & welfare staff have a clear understanding of the main issues involved in workplace stress prevention and management.

4.3.2.1 People job satisfaction and its impact on health & safety

Many companies have made significant improvements in safety records, but have eventually reached a plateau. Accidents commonly occur in organizational operations, particularly in many manufacturing companies. There are certain recognized factors which affect the occurrence of accidents. Robert Cooke of the University of Illinois at Chicago and The Reliability Group, a Miami, FL-based consulting firm, revealed that some 80 variables have a significant statistical effect upon accident rates (Personnel, 1991). The factors most consistently associated with job-related injuries include environment, the mood among workers, employee selection practices, types of work procedures, role clarity, and job satisfaction & stress (Personnel, 1991). In a similar study, Sherry (1992) identified five major factors related to potential causes of accidents, i.e. psychological, environmental, ergonomic, physical, and stress. The consensus among the safety professionals is that upwards of ninety percent (90%) of all accidents occurring in the workplace may be attributed to behavioural factors. The importance of understanding how behaviour influences safety performance cannot be underestimated. A more important notion is that by increasing concentration and effort placed on the influence of human behaviour, accidents and injuries can be significantly reduced in the workplace. The purpose of this study is to demonstrate that employee job satisfaction can significantly impact employee safety performance. This belief is based upon an observation and questionnaire analysis conducted at a manufacturing firm. This finding will provide important information to managers in improving employees' safety performance.

4.3.2.2 Measuring job satisfaction through a job-satisfaction survey

This has been done using the Job Satisfaction Survey Scale by Paul E. Spector, Department of Psychology, University of South Florida. The respondents were requested to complete the Job Satisfaction Survey developed by Paul Spector (JSS; Spector, 1985). The instrument provides sufficient reliability, validity, and normative data measurements.

The JSS can yield 10 scores. It assesses 9 facets including pay, promotion, supervision, fringe benefits, contingent rewards, operating conditions, co-workers, nature of work and communication. Each of the subscales consists of four items. The overall job satisfaction score is computed by summing all 36 items.

The items are presented as statements and are evaluated by marking the alternative that seems closest to one's experience on a scale from 1 to 6. Some of the items are stated in a positive and some in a negative direction. Positively-directed items indicate job satisfaction and negatively-directed items indicate job dissatisfaction. Negatively-worded items must be reversed: score 6 is changed to 1, 5 to 2, etc. (Spector, 1985; Spector, 1997). The data were analyzed using the statistical package SPSS 23.0.

4.3.2.3 Results

We have done mean and standard deviation analysis of the nine subsets of the Job Satisfaction Survey Scale.

Table 1: Promotion and job satisfaction

	Mean	Std. Deviation
Promotion	3.69	.873
	2.58	1.257
	5.24	.698
	2.56	.538
Average	3.52	0.842

Table 2: Pay package and job satisfaction

	Mean	Std. Deviation
Pay Package	3.53	1.235
	4.14	1.035
	3.46	1.755
	2.17	.954
Average	3.33	1.24

Table 3: Supervision and job satisfaction

	Mean	Std. Deviation
Supervision	5.87	.418
	1.00	.000
	1.08	.273
	5.93	.326
Average	3.51	0.3

Table 4: Fringe Benefits and Job Satisfaction

	Mean	Std. Deviation
Fringe Benefits	3.97	1.087
	4.08	.837
	4.12	.879
	2.54	1.306
Average	3.68	1.04

Table 5: Communication and Job Satisfaction

	Mean	Std. Deviation
Communication	5.83	.378
	1.17	.865
	1.05	.219
	1.05	.219
Average	2.23	0.42

Table 6: Operating Condition and Job Satisfaction

	Mean	Std. Deviation
Operating Condition	1.38	.919
	1.09	.288
	4.48	.689
	2.78	1.515
Average	2.43	0.85

Table 7: Contingent Reward and Job Satisfaction

	Mean	Std. Deviation
Contingent Rewards	5.28	1.026
	1.33	.514
	3.52	1.068
	3.39	1.550
Average	3.38	1.04

Table 8: Nature of Work and Job Satisfaction

	Mean	Std. Deviation
Nature of work	1.01	.100
	5.66	.590
	5.70	.482
	5.51	.522
Average	4.47	0.43

Table 9: Co-workers and Job Satisfaction

	Mean	Std. Deviation
Co-workers	5.99	.100
	3.24	1.199
	5.88	1.855
	1.44	.783
Average	4.13	0.98

The data analysis of the Job Satisfaction Survey and the secondary data shows that supervision satisfaction and present work satisfaction have a direct correlation with the safety performance. Employees rank their supervisors and jobs higher on the JDI satisfaction scale. As Herzberg (1966) suggested, individuals have two levels of needs: the hygiene or maintenance needs (dissatisfies) extrinsic to the job, which include company policy, supervision, interpersonal relations, working conditions, pay, status and security; and the higher order needs (motivators) intrinsic to the job and related to their ability to achieve and experience psychological growth, which include achievement, the work itself, responsibility, growth, and advancement. Managers should understand that it is important to maintain the hygiene factors at a level that is satisfactory to employees. Although both sets of factors operate to satisfy employee needs, the motivators provide the impetus for improved performance.

4.3.2.4 Correlation of job satisfaction with health & safety

Correlation is a technique for investigating the relationship between two quantitative, continuous variables. The null hypothesis is that People Job Satisfaction impacts people health & safety.

Job Satisfaction Survey has multiple facets as mentioned above.

Table 10: Correlation of job satisfaction

Pearson Correlation Sig. (2-tailed)	Correlations	
	Health & Safety	Job Satisfaction
	1	.740
		.260

In conclusion, it indicates that the strength of association between the variables is high ($r = .740$) and that the correlation coefficient is significantly different from zero ($P < 0.001$). Accidents commonly occur in organizational operations, particularly in many manufacturing companies. The consensus among safety professionals is that upwards of ninety percent (90%) of all accidents occurring in the workplace may be attributed to behavioural factors. The importance of understanding how behaviour influences safety performance cannot be underestimated. A more important notion is that by increasing concentration and effort placed on the influence of human behaviour, accidents and injuries can be significantly reduced in the workplace.

4.3.2.5 Occupational Stress and Safety

Stress is a legitimate worker safety and health issue, the experts say. It affects men and women, new and experienced, across every industry. Some workers carry stress from their homes to their jobs. Regardless, workers experience stress, and a stressed worker has the potential to be an unsafe worker. But few employers seem willing to tackle job stress as a safety concern.

The study concluded many workers experience higher levels of stress due to being overworked. This may include working long shifts, overtime and not taking a vacation or paid time off even when available. Stress can also contribute to an increase in workplace accidents. Dr. David Spiegel, medical director of the Stanford Centre on Stress and Health, said there is a direct correlation between an increase in work stress and an increase in workplace accidents. "It's very clear that a big proportion of safety problems are due to human error, and some of that is related to stress," Spiegel said.

It is advised to work on to reduce workplace stress by creating recognition systems to reward employees for good work performance. Opportunities for career development and advancement and managerial actions that are consistent with organizational values also help to lower workplace stress. Employers can also enact administrative controls such as reducing shift length or physical demands of tasks. Stress management and other wellness programs can also be introduced to help workers cope with stress sources. Further employers need to be flexible in work hours and tasks when workers have responsibilities or other factors in their personal lives that are creating stress.

5. HOW CAN WE SOLVE THE ISSUE - ACTION POINTS

To solve the above-mentioned industry challenges and based on the safety training principles, we have concluded the following action points:

5.1 Development of safety climate

Safety climate refers to employees' perceptions of how much safety is valued in an organization. These perceptions are formed over time as people use safety systems; listen to what others say, and particularly what they do when it comes to safety. When

positive perceptions of safety are consistent across the organization, a positive safety climate exists and employees are more likely to act safely. 'OSH culture' - can be seen in terms of the relationship between organizational culture and OSH. OSH culture is about how an organization's informal aspects influence OSH in a positive or negative way. This is done at two levels by setting the values and norms, and underlying beliefs and convictions, through which workers deal with or disregard risks, by influencing the conventions for (safe or unsafe, healthy or unhealthy) behaviour, interaction, and communication. OSH culture can be described in terms of the informal, cultural aspects of an organization. The term 'OSH culture' is, in fact, not used very commonly. Most research and related literature are instead focused on the concepts of 'safety culture' and 'safety climate'. The notion of corporate 'health culture' is, on the other hand, less widespread in the research literature.

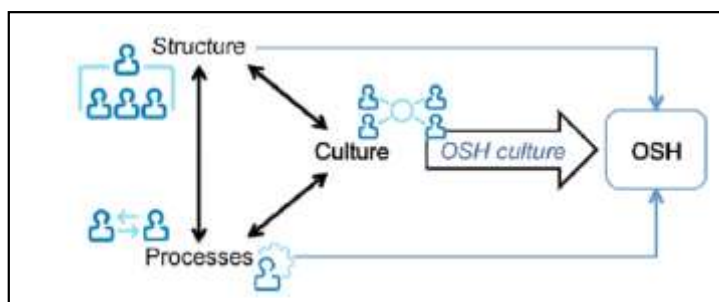


Fig. 2: Development process

Nevertheless, the term 'OSH culture' is further used in this review in order to stress the interrelatedness between issues linked to occupational safety and work-related health. Moreover, as the relation between poor workplace practices and ill health are less apparent than between unsafe work environments and resulting injuries, the informal aspects influencing occupational health are even more important than those linked to safety issues.

The term 'safety climate' has already been mentioned above, originating from a psychological approach towards safety culture. Although the two terms and underlying concepts are related, and often used interchangeably, safety climate and safety culture are not the same. Safety climate can be regarded as a more superficial and momentary reflection - a snapshot - of an organization's safety culture. When considering the different layers of organizational safety culture, safety culture addresses the deeper, implicit convictions (at the core) which are shared amongst the members of a group, and which are expressed, amongst others, through the safety climate, i.e. the shared perceptions of workers regarding safety and their working environment. Using a metaphor, organizational (safety) culture could be seen as the personality of an organization, whereas (safety) climate as the organization's mood.

Safety leaders exhibit a strong commitment towards safety, motivate staff and provide a positive example of safety; this will improve the safety climate. If we keep our safety leadership efforts, overtime, it will cause people to reassess their deep beliefs, values about safety and have a positive effect on safety culture. Through the actions of safety leaders, we can create a positive safety culture, resulting in better safety performance, which will help our employees' safety at work.

By investing in safety leadership, we start to influence safety climate, and over long term build a positive safety culture. The end product is improved employee safety behaviour.

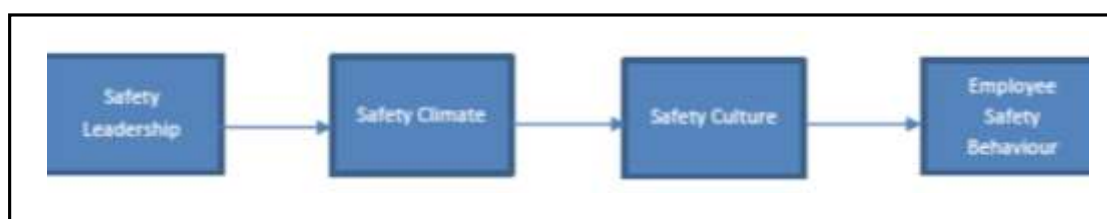


Fig. 3: Flow diagram of the process

5.2 Identification of the training need

The lifeblood of any effective training programme lies in correctly identifying who needs to be trained, in what, and for what outcomes. In order that you train the right people, in the right competencies, with the right learning methods, it is important that you undertake an effective needs analysis before implementing any health and safety training programme. A 'needs analysis' is the process of identifying and evaluating needs in a community or other defined population of people. In identifying a need, you will need to follow a process of describing the 'problems' or 'issues' of your target population and highlighting possible solutions to these problems.

Like most programme evaluations, an effective needs analysis should focus on the future and what should be done, as opposed to what has been done thus far. More specifically, a Training Needs Analysis (TNA) is 'the process of identifying the gap between employee training and needs of training. In order to determine whether training will address the problem(s) identified, a TNA forms the first stage in the training process. In viewing training as an 'acquisition of skills, concepts or attitudes resulting in improved performance within a working environment', a successful TNA will consider each aspect of an operational system so that initial skills, concepts, and attitudes (the human elements inherent in an operational system) can be effectively identified and the right training specified. A TNA should form part of the 'system development processes' due to the close links between system design and the training required.

5.2.1 Steps for conducting a worker safety training need assessment

Identify the desired outcome: Before undertaking a health and safety TNA, an employer will need to convey the goal of the training i.e. what are the expected outcomes? The training goal should match an overarching objective, whether it is specific to a work unit, department, at organizational level or with an individual employee. For example, health and safety linked business goals/objectives:

- Reduced injury & illness rates
- Improved productivity/output
- Increased workforce morale
- Reduced sickness absence
- Reduced insurance premiums

5.2.2 Link desired business outcomes with employee behaviour

A multitude of behaviours can be associated with the desired business outcome and each is a result of employees knowing what to do and having the capability and motivation to do it.

5.2.3 Consider the following inputs while identifying training needs of workers

- Inputs from supervisor
- Risk assessment of the process where the worker is working
- Task observation

5.2.4 Identify and understand the gaps

Identify the required competencies and the existing level of competence and gaps in that.

5.2.5 Set priorities

At this stage, you should seek the number of employees or the percentage of the workforce as a whole (or workforce targeted) that is in need of training while looking at the importance of the competency in question (as identified in your previous stages). In considering both these aspects together, a list of training priorities will be your outcome.

5.2.6 Identify the modes of training

With various methods for training at your disposal, decisions on how to train your workforce will need to be determined. Training methods might include:

- On the job
- Mentoring/coaching
- Classroom-based training
- Online learning (interactive)
- Blended learning (a combination of the last three options)

5.2.7 Evaluate ROI

Ultimately, any training delivered can only be deemed successful if the information imparted as part of the process has been retained and implemented in the working environment. Similarly, to identify the training needs, you will need to establish to what extent the training has:

- Improved the competencies targeted
- Improved job performance
- Resulted in a positive ROI

5.2.8 Undertake a cost-benefit analysis

Training, like any other organizational resource, makes for a considerable investment – both in time and money – so you will want to ensure that the associated costs are met by covering as many gaps in performance as possible.

5.3 Provide OHS awareness training

The Occupational Health and Safety Awareness and Training regulation requires health and safety awareness training for every worker and supervisors. It focuses on the health & safety rights and the responsibilities of the workers, supervisors & employers. It also serves as a general introduction to workplace health & safety. Health & safety awareness training is a significant foundation for developing safe work skills, paving the way for employees to acquire other safety competencies. If this fundamental training is not delivered well, employees who proceed to subsequent training may suffer setbacks without an elementary proficiency in health & safety.

The structured awareness training can be in the following areas:

- OHS policies and incident reporting
- How to handle emergency situations
- Workplace hazards and controls

The sole objective is to reinforce that the workplace is safe only when everyone is safe.

5.4 Train workers on their specific OHS areas

Occupational Health and Safety (OHS) training is a great way for the employees to learn additional skills & knowledge and to reinforce quality work practices which will result in a change in workplace behaviour. Investing in effective employee training

will increase skills, knowledge, productivity & morale as well as replace and avoid workplace incidents. The work hazard areas like hot work, confined space, forklift operation, electrical safety, fire safety, LOTO are few specific issues where organizations face challenges. These are the areas where the safety structure needs to be built up after safety foundation course.

5.5 Train on behaviour-based safety

96 percent of all workplace accidents are triggered by unsafe behaviour. Behaviour-Based Safety is a scientific way to understand why people behave the way they do when it comes to safety. It is the systematic application of psychological research on human behaviour to the problems of safety in the workplace. If properly applied, it will initiate an effective next step towards creating a truly pro-active safety culture where loss prevention is the core concept.

Behaviour-based safety, or BBS, is at the core of a diverse range of modern safety training programmes. Large corporations & small businesses alike, recognize the benefits of stopping accidents & injuries before they happen. BBS is founded on the principles of curing dangerous practices & behaviours, resulting in higher productivity and safer work environments.

6. CONCLUSION

Employees need safety training for their regular jobs or whenever their job changes in a substantial way. This is especially true when an employee is exposed to increased risk, such as when they take a new position, gets a change in duties, gets introduced to new equipment or changes in how equipment is used and is introduced to new technology. Safety training should also be implemented when the employee works with more at-risk jobs or critical tasks or needs to satisfy the employer's insurance provider.

Some conclusions can be drawn from the research & study on Worker Safety Skill Training:

- a. Worker Safety Skill Training and capacity building through effective learning is one of the major contributors to minimize the number of occupational accidents.
- b. Acknowledgment of the importance of staff/workforce training from the top management of any organization is very crucial and the leadership support through structured planning and provision of optimum resources is mandatory.
- c. There are several challenges to plan, design and implement an effective worker training program. However, the organizations can face the challenges through an understanding of the underlying principles and specific action plans.
- d. The implementation of industry-based OHS learning model is more effective in improving learning outcomes in all domain (cognitive, affective, psychomotor) than the existing learning model that has been used so far. While identifying the training needs, the context of the learning should be considered which helps the organization to understand the balancing act between need and resources.
- e. Finally, the action items are summarised towards the foundation/awareness training, specialized risk-based training for the workmen based on the context of learning. Both of these training are to be supported by behavioural training which will improve the attitude towards safety and improve the organizational safety culture in the long run.

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