

Guiding Organisations in Building a Safety Culture Ecosystem

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Abstract

Safety culture is a top priority in most organisations. This article presents field-tested methodologies that would help guide organisations' actions in understanding and developing behavioural safety culture in practice, and for resolving complex and dynamic concepts and processes involved in safety culture development into simple, doable, and achievable behaviours. For the benefit of companies, six aspects of safety culture methodology and ecosystem are described, such as organisational restructuring requirements for safety culture ecosystem, outline of safety culture concepts and methodologies, safety culture implementation data, highlights of safety culture progress, learnings of ONGC, and a case-study of a chemicals company. The case-study depicts observations by month, observations of safe behaviours/at-risk behaviours/spot-corrections, observations by department, observations by behaviour categories, benefits of safety culture implementation, and objectives and action plan of the safety culture steering committee. Directors/Management focus on the safety culture trends data and review its progress regularly. The methodological and structural essentials of guiding organisations for building a safety culture ecosystem are summarised.

Keywords: Organisations, Safety Culture, Ecosystem

Background

The worst behaviour that most people imbibed in the name of enforcing discipline is being reactive and harming many around them in organisations, homes, roads, and almost everywhere. This is the approach when we talk about

a positive safety culture development. Safety culture is every individual's selfless effort to save people from an injury, and an organisational safety culture transformation is a mega-noble intervention, a long-term involvement of people to save the manpower from any incidents. Hence, the function of safety culture and sustainable development are closely related (Nawaz et al., 2019).

It is yet unclear how different aspects of an organisational system operate in a linear manner to influence safety culture development that would depend on employees learning from demonstrated behaviours, positive enabling environment, and consistency over time (Tiffany et al., 2021). Many times, the organisations learn through own practical experiences to drive safety culture behaviours.

Guiding organisations in safety culture methodologies is important, but lacking in adequate research approach. Companies often experience right and wrong guidance from consultants. Almost all organisations would need experts' help in safety culture transformation. However, they should differentiate between the consultants and experts while choosing such interventional support. Wrong guidance would slow down change process, whereas the right professional approach would accelerate growth in safety culture behaviours. Experts' guidance, combined with company directors' vision, when implemented in regularity brings best results. Safety culture methodologies involve the concepts, processes, actions, measurements, endpoints, and so on. Most organisations (65%) are still operating with basic piecemeal insights and are missing out on real-time safety culture insights (Sphera, 2022).

A vast amount of research on safety culture concept has not reached its consensus definition and content. A framework called 'Integrated Safety Culture Assessment' (ISCA),

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with its practical useability includes the technological, organisational, and human factors interrelating with each other, considering both observable and non-observable safety-related aspects (Van et al., 2022). Several studies have indicated that positive, proactive safety cultures in the workplace environment could reduce the occurrence of accidents. However, there is a lack of consensus on indicators pertaining to good practices, methods, and improvement strategies related to a holistic understanding of measuring safety culture to assess the level of safety culture in the organisations (Deepak & Gangadhar, 2022). Companies such as Sembcorp, Thermax, AFCONS, and DCM Shriram reported good practices, such as one observation per employee per day for spot-correction of at-risk behaviour at their workplaces, and using qualitative aspects of safety culture, like employees' stories, video clips, and reverse toolbox talks (Lal, 2021, 2022). Research suggested that mixed methods combining quantitative and qualitative approaches can help gain a deeper understanding of safety culture (Aouicha et al., 2022).

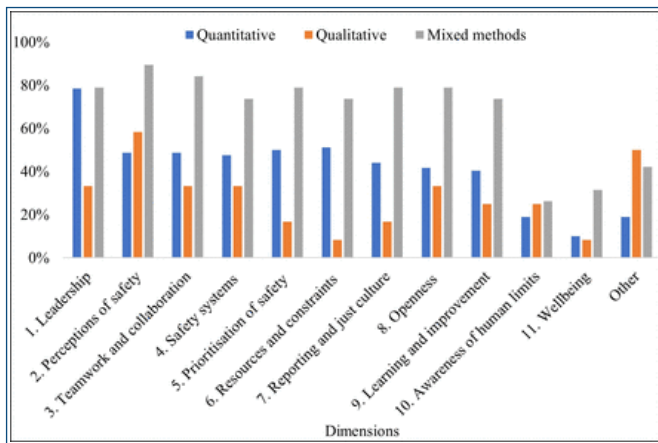


Fig. 1: Safety Culture Themes
(Churruca et al., 2021)

Qualitative and mixed methods approach were more likely to identify additional dimensions of safety culture not covered by the 11 themes shown in Fig. 1. There is a need for careful planning of both the qualitative and quantitative methodological approach that companies take, to assess and understand the core aspects of safety culture more comprehensively, including the contextual aspects of safety culture for achieving better results in terms of loss prevention.

Methodology for Guiding Organisations toward Building a Safety Culture Ecosystem

This article describes the six aspects of safety culture development for guiding organisations in the process of creating a behavioural safety culture ecosystem:

- Organisational restructuring requirements for safety culture ecosystem.
- Outline of safety culture concepts and methodologies.
- Safety culture implementation data.
- Highlights of safety culture progress.
- Learnings of ONGC.
- Case study of Gharda Chemicals.

Organisational Restructuring Requirements for Safety Culture Ecosystem

- Company directors, corporate team.
- Each business division teams.
- Contractors, customers, community teams.
- Company's site teams.
- Formation of safety culture experts' group.
- Team of trainers within the company.

Directors on the corporate board actively emphasise and support the company management, who in turn guide the HSE and functional/operational heads to jointly form a steering team to drive the supportive safety culture down the levels, along with the involvement of all employees/contractors/other stakeholders. These structural aspects for building a safety culture ecosystem are essential in guiding organisations. To be successful, the economic, environmental, and social issues of sustainability must be integrated at all levels of the organisation (Clauß et al., 2022). The company directors and business heads expressed their commitment to safety culture transformation as follows: "I will not give up while creating a safety culture ecosystem. I will not let it die. This is my dream project. Call me anytime for support. I am available 24x7 for safety" (Personal Communications, 2022). The company aims to develop an independent sustainable procedure of a positive safety culture through

its own team of trainers within the company, which takes a couple of months/years depending on its manpower size, cultural maturity, and directors'/top management's involvement.

Outline of Safety Culture Concepts and Methodologies

Onsite Training of safety culture champions/trainers/implementers/coordinators, and review for six months, with monthly online two-hour project progress handholding, support, and follow-up.

Safety culture is an organisation's long-term planned intervention of behavioural science. Managements are adopting ISO45001 to empower their manpower, including contract workers, to be vocal in spot-correction of all at-risk behaviours in the workplace, to achieve the larger mission: Bharat Bane Surakshit. Following this approach, at-risk behaviours at sites reduced from 30% to less than 5%, and the severity and frequency of incidents reduced significantly.

Training Objectives to Achieve

- Train the company's trainers on safety culture implementation for sites/plants.
- Trainers would cover all employees and workforce about safety culture awareness.
- Keep observing daily for spot-correction of at-risk behaviours.

- Make it a job procedure at site and monitor it for safety culture trends analysis monthly.
- Trainers would transfer this safety culture knowledge to everyone and develop them as safety culture observers.
- Make safety culture simple and in the local language for everyone, including the last person, to follow and practice daily.
- These trainers would conduct safety culture training for their workforce regularly for best ROI.

Contents of Safety Culture Implementers' Training

Introduction and inauguration by top management, basics of safety culture behaviours, and case studies from different industries. Role of observers, steering committee, and apex committee for effective implementation of safety culture. Implementation technique for safety culture. Auditing and reviewing technique. Implementation support. Observation, counselling, communication, and reporting techniques. Monthly follow-up and handholding. Practical observation round, analysis of data and improvement in safety culture implementation. Guidance as deemed fit to solving the issues arising in-between the implementation of safety culture.

Safety culture implementation journey (Table 1) is a behavioural science, long-term supportive intervention well tested in India and outside, with measurable results for zero-harm goal.

Table 1: Online Safety Culture Implementation Plan for Each Thermax Business in Four Steps

Safety culture implementation for each Thermax Business to be covered in two batches per month.					
Each batch will have maximum people possible.					
Each month there shall be two sessions, one session per batch.					
Training for each of the two batches in each business shall be conducted for 2-3 hours for the first month, and monthly two-hour sessions for safety culture progress follow-up for two batches, separately, from the second to the sixth of the month.					
Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Week 1: Inauguration and Batch 1: 3 hours' training	Monthly 90-minute follow-up for two batches	Monthly 90-minute follow-up for two batches	Monthly 90-minute follow-up for two batches	Monthly 90-minute follow-up for two batches	Monthly 90-minute follow-up for two batches
Week 2: Batch 2: 3 hours' training					
Batch size: Unlimited					

Major Objective

Achieve interdependent safety culture transformation, with zero-harm zero-blame. Safety culture is a value addition of brotherhood by one and all to the work culture.

Three common stages or steps of safety culture implementation:

- Safety culture steering team formation at every business, as well as each site, to drive/review safety culture implementation.
- Safety culture mass-communications to all and phase-wise observers' training as per the behaviours checklist.
- Monthly safety culture progress review, score measurement, finding implementation gaps, and handholding.

Select safety culture champions/trainers/implementers/coordinators from each site areas – only those who are safety-minded, good communicators, interactive and not reactive, and supportive.

Safety Culture Roadmap for Sites

First three months' safety culture implementation activities template:

- CEO circular to all for safety culture implementation.
- Form safety culture steering team at the corporate office, as well as each site. Monthly circular of corporate/site head for reinforcing supportive safety culture.
- Begin safety culture mass-communication at all areas, for creating safety culture awareness.
- Appoint each area's safety culture coordinators who are non-HSE persons, who would conduct weekly safety culture mass-communications.
- Name your safety culture project for its identity. Celebrate safety culture month.
- Develop observers as per checklist in each area to conduct mass-communications and TBT.
- Continue reverse TBT. Let workers talk about their observations/spot-corrections.
- Display behavioural safety culture banners in all areas/office.

- Maintain site safety culture score board. Daily five-minute observation round as per the 12-point behavioural safety culture checklist by everyone, including the last person, to be linked to employee's key performance indices (KPI). Reward best observers monthly.
- Dashboard for inter-observers' sharing of at-risk behaviours across departments weekly.

Next three months' safety culture implementation activities template:

- Monthly follow-up, handholding, support, and review, along with expert guidance.
- Safety culture linked to EHS annual index/policy.
- Adopt safety culture corporate and site policy and display the same.
- Linking behavioural safety culture to vendors' T&C.
- Link safety culture to families and schools. Observations of self, colleagues, and seniors.
- Measure behavioural safety culture on monthly safety statistics.
- Regular involvement of top/site management.
- Safety cultural change from 1 to 4 (from reactive to interdependent safety culture).
- Develop lead trainers and site behavioural safety culture active coordinators for weekly reviews at locations.
- Developing IT-enabled safety culture observation checklist for data analysis each month.

Measure behavioural safety culture performance: 20 actions x 5 marks each = 100 per cent

Note: Organisations need to review the onsite monthly/quarterly safety culture implementation progress and find gaps in actions, and support/handhold further to sustain interdependent safety culture.

Important: Combination of the above 20 actions facilitates initiation of a supportive safety culture during the first six months, which must continue over months/years to sustain in an organisation.

Management Clarifications

- Top management training/meeting in offline mode.

- Training of ‘Train the trainers’ (safety culture trainers who will conduct training of observers) in offline mode. The expert will conduct this one-day training for all businesses together in a uniform manner.
- Quarterly review in offline mode; it would be online every month.
- Safety culture implementation roadmap for project sites; as mentioned above, 20 action points.
- Expected structure of steering committee (HO, site): all functional heads.
- Expectations from top management: should inaugurate safety culture project, be present occasionally.
- Review frequency: monthly; mechanism template is as above, in 20 action points.
- Focusing on safety culture observation checklist behaviours and safety culture score board.
- Number of trainings to be conducted: two in the first month and two follow-ups from the second to the sixth month, for each division.
- Batch size of training: Unlimited.
- Online training mode can be Teams/Zoom/Webex.

Safety Culture Implementation Data

The Indian industry, largely, in their documents and speech, consistently formed an opinion of ‘production not at the cost of safety’. However, in practice, it is business first, safety least. Building a safety culture ecosystem in major establishments has helped balance this difference to a great extent (Lal, 2021), as mentioned below:

The head office safety culture steering team for each business division consisted of:

CEO: Chairperson

All functional heads: Members

HSE head: Convener/Coordinator

The steering team focused on conducting regular safety culture progress reviews for assessing and understanding behavioural trends across the sites for overall organisations’ cultural change management (Table 2).

The SEIL Company manages health, safety, and environment (HSE) as its core value. To further strengthen the safety culture and secure a positive behavioural change within the workplace, the company has implemented and integrated behaviour safety culture into its safety systems across all the assets. Company has the target to reach holistic interdependent safety culture by the end of 2022. Company has set a target to reduce unsafe behaviours in increments. Company believes that 88% of the safety incidents are caused due to unsafe behaviours, which are largely context driven. Company is an Integrated Management Certified Organisation for ISO 45001:2018, which mandates that human competence and behavioural elements need to be considered in risk assessment as an internal issue for managing risks. Our primary job is to perform our work safely. Industries have shown that a majority of the accidents are triggered due to unsafe acts. OHSAS 18001:2007 mandates that we encourage behavioural safety culture to ensure our workplaces remain safe (Personal Communications, 2022).

The main key or tool for an improved safety culture at sites is 100% spot-correction of at-risk behaviours daily by observers, thus resulting in an overall safety culture performance of the company, which leads to a sustainable production performance (Danu et al., 2022).

Table 2: Base-Level Analysis of Behavioural Safety Culture Data

Sr. No.	Site Name	No. of Safe Behaviours	No of At-Risk Behaviours	No. of Spot-Corrections of At-Risk Behaviours
1	BPCL, Bargarh (Odisha)	76	14	14
2	CINDA, Dahej (Gujarat)	676	240	240
3	Dalmia Cement, Umrangso (Assam)	80	38	38
4	DORC, Nigeria	52	31	31
5	HPCL Bhatinda, Punjab	80	27	27
6	HRRRL Barmer	195	123	123

Sr. No.	Site Name	No. of Safe Behaviours	No of At-Risk Behaviours	No. of Spot-Corrections of At-Risk Behaviours
7	IOCL, Vadodara (Gujarat)	3000	1100	1100
8	Jalna site	6	6	6
9	JK Cement, Panna (MP)	13	26	26
10	JSW, Dolvi (Maharashtra)	139	21	21
11	Mundra Factory (Gujarat)	3082	482	482
12	Murli Industries, Chandrapur (Maharashtra)	342	102	102
13	Nayara Energy, Jamnagar (Gujarat)	425	177	177
14	PCBL, Chennai (Tamil Nadu)	3	1	1
15	RIL HMD HRSR Relocation	54	25	25
16	RIL JMD HRSR Relocation (Gujarat)	513	198	198
17	Suryadev Alloy, Chennai (Tamil Nadu)	468	131	131
18	TOYO, Panvel (Maharashtra)	1453	611	611
		<u>10657</u>	<u>3353</u>	<u>3353</u>
	% Safe	76		
	% At-risk	24 (early warning assessment)		
	% Spot-correction	100		
	Final Improvement	100%		
		Interdependent Safety culture		

Highlights of Safety Culture Progress

- Safety culture training conducted at sites = 32
- Safety culture observer developed = 168, 32% covered, remaining will be covered.
- Number of at-risk behaviours reported = 126
- Number of spot-corrections = 121
- Number of barriers = 5
- Safety culture banner displayed.
- Covered safety culture topic in daily TBT as well.
- Mass-communication conducted on safety culture (Fig. 2 & 3).
- At-risk behaviour reporting increased – 200 reports received and spot-corrected.
- Banners displayed across all sites.



Fig. 2 & 3: Safety Culture Mass-Communications

Learnings of ONGC

General Manager of ONGC expressed that the ‘behavioural safety culture awareness programme’ was very interesting, a learning experience, and motivating in achieving the organisational goal of ‘zero harm’ to people and environment. It is a very good initiative taken under the vision of the company director to create a pool of trained observers in a mission to achieve ‘zero unsafe behaviour’ in our esteemed organisation with value addition. The mentor delivered the lecture with a practical example in a nice manner and kept the entire session lively and pleasant. We learnt about independent safety cultures, dependent safety, and interdependent safety with a thrust to eliminate a reactive safety culture. The motive of the training was to create sensitivity towards safety to all the workforce in the organisation and develop more and more safety observers. We learnt that the observer should be humble, polite, and focused in his work, with a big brother approach for spot-correction of any at-risk behaviours. Further, we learnt about becoming good safety observers and implementing it without hierarchy and fear. The mentor also highlighted process safety and behavioural safety for better understanding and implementation. We learnt the impact of ‘reverse safety talk’ and ‘safety culture score card’. Safety behaviour can be measured, corrected, and implemented. More observations and more spot-corrections shall produce tremendous change and encouraging results. “There is no qualification, level, gender, or age bar to become an observer”. To achieve zero unsafe behaviour, this is very useful everywhere, either at workplace or home, and every moment in all parts of life. We are very much benefitted and would continue it throughout life to enhance safety culture. This will be reflected as value addition in our organisational culture (Personal Communications, 2022) as safety culture is a facet of organisational culture (Claxton, et al., 2022).

Case Study of Gharda Chemicals

This describes various facets of safety culture development in terms of observations by months, observations of safe behaviours/at-risk behaviours/spot-corrections (Fig. 5), observations by departments,

observations by behaviour categories, benefits of safety culture implementation, and objectives and action plan of safety culture steering committee (Tables 3 to 8).

Table 3: Observations by Behaviour Categories

SR. No	Observation of Behaviours Categories			Total Observation (Safe&Risk Behaviours)	
	12 BEHAVIOUR CATEGORIES	No. Of Safe Behaviours	No. of At-Risk Behaviours		No. of Spot corrections of At-Risk behaviours
1	PPE	15950	3934	3934	19884
2	Housekeeping	3947	1328	1328	5275
3	Material Handling	2688	544	544	3232
4	Using tools and equipment	2530	510	510	3040
5	Body positioning/protecting	2139	410	410	2549
6	Following Procedures	2137	271	271	2408
7	Communication-Verbal/Nonverbal	1333	191	191	1524
8	Visual focusing (attentiveness)	1057	89	89	1146
9	Using mobile while working	872	17	17	889
10	Road Safety	509	242	242	751
11	Emotional care	165	45	45	210
12	Post Covid/Lockdown Behaviours	87	15	15	102
	Total	33414	7596	7596	41010

Behaviours are definable, observable, spot-correctable, measurable, and implementable. The safety culture observers go for observation rounds, observe these behaviours, appreciate safe behaviours, and correct at-risk behaviours on the spot. Tables 2, 3, 4, and 5 and Fig. 4 reveal how these behavioural observations are analysed.

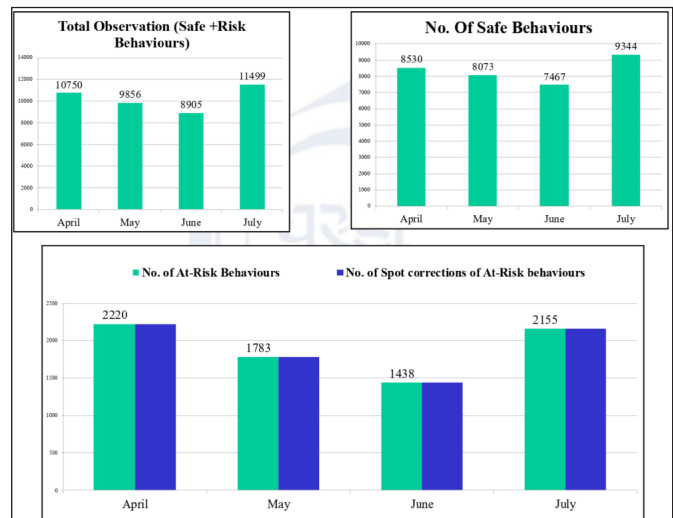


Fig. 4: Observations of Safe Behaviours/At-Risk Behaviours/Spot-Corrections

Month-wise data indicates that more observations would incrementally result in more safe behaviours and reduced at-risk behaviours. The safety culture steering committee authorises the respective department heads and line managers to nominate the departmental co-ordinator and

observers. After successful completion of training, the trained observers start identifying the area-wise at-risk behaviours and send reports to the respective area in-charges/head HSE.

Table 4: Observations by Department

Observation of Departments					
SR. No.	Departments	No. Of Safe Behaviours	No. of At-Risk Behaviours	No. of Spot corrections of At-Risk behaviours	Total Observation (Safe&Risk Behaviours)
1	Plant 4	6992	1301	1301	8293
2	QA	5246	459	459	5705
3	Plant 2	3589	652	652	4241
4	Plant 3	3333	861	861	4194
5	R&D	2593	559	559	3152
6	Plant 1	1692	457	457	2149
7	Pilot Plant	1633	476	476	2109
8	Maintenance	1775	314	314	2089
9	Instruments	1499	376	376	1875
10	Electrical	1709	158	158	1867
11	Utility	1160	495	495	1655
12	Safety	1105	530	530	1635
13	ETP,TF,MEE	415	361	361	776
14	HR.Admin	92	387	387	479
15	Project	395	80	80	475
16	Civil	121	56	56	177
17	Store	65	74	74	139
	Total	33414	7596	7596	41010

All departments have safety culture observers being mentored by their respective HODs.

risk behaviours, and increase in spot-corrections, as the number of observers keep increasing every month.

Table 5: Observations by Month

Observations In Month					
SR. No.	Month	No. Of Safe Behaviours	No. of At-Risk Behaviours	No. of Spot corrections of At-Risk behaviours	Total Observation (Safe&Risk Behaviours)
1	April	8530	2220	2220	10750
2	May	8073	1783	1783	9856
3	June	7467	1438	1438	8905
4	July	9344	2155	2155	11499
	Total	33414	7596	7596	41010

Safety culture behavioural observations are analysed and tabulated on a monthly basis for comparing trends in terms of increase in safe behaviours, decrease in at-

Table 6: Objectives of Safety Culture Steering Committee

Safety Culture Steering Committee	
Objectives :	
<ul style="list-style-type: none"> • Drive improvement in safety behaviours, work conditions and reduce at-risk behaviours. • Provide support for the successful implementation of this program • Ensure that there is 100% participation and involvement from trained employees in safety behaviours program • Ensure that every job will have the instructions and training needed for the task to be performed safely • Raise safety voice for each employee • Ensure that the required tools/resources are made available • Reduce risks associated with work task. • Work closely with management to complete production and jobs safely. 	

Table 7: Action Plan of Safety Culture Steering Committee

Steering Committee
<p>Action Plan :</p> <ul style="list-style-type: none"> • Training to all contractors' employees. • Analysis of individual departmental observations trend with the help of safety culture coordinator. • Follow-up for compliance of incomplete observations. • Motivate to all employees for participation in this program. • Recognition of more employees who take active participation . • Act on Committee members suggestions.

There is a need to develop criteria for assessing the structural elements of safety culture (Havlovská et al., 2022), such as a steering committee, corporate board, management, contractors, and all stakeholders, to drive the objectives and action plan of the safety culture steering team in a responsible manner.

Table 8: Benefits/Indicators of Safety Culture

Benefits of Safety culture to Our Company :
<ul style="list-style-type: none"> • Enhanced Reporting • Increased Hazard Recognition • Easily Share Recognized Hazards • Data gathered is used to enhance program • Trended data used to enhance program • Employees have greater sense of ownership of the HSE program • Reward/recognition improves participation and quality observations.

The benefits and indicators of safety culture would depend on the implementation actions of the safety culture steering team, involving all stakeholders for risk controls and spot-corrections. On August 2018, Sembcorp's then Group CEO announced about the safety culture implementation to all employees: "Over the years, we have put in our best effort in ensuring that our employees and associates are safe, as we carry out our businesses

efficiently. We recognise that to sustain in business, right mind-set, good safety performance, and positive safety culture are required. Towards a common goal of zero harm – everyone speaks up on safety. As the marketplace transforms and as we reposition our businesses for the future, we are looking for ways to strengthen our competitive edge by investing in new technologies and processes in our operations. For example, in our waste management business, we have invested in new technologies on our waste collection vehicles and are exploring further new technologies, possibly going as far as using electric vehicles for collection in the future. At the same time, employee's safety is a pre-condition for work and business growth. Everyone must develop the habit of getting the basics right – comply with safe methods of work and wear mandatory and task-specific PPEs. This was mind-set challenge and a requirement to create confidence to reinvest in our businesses and employees together with the same energy and emphasis" (Personal Communications, 2022).

Conclusion

Barriers to workplace safety culture were identified as employees not feeling listened to or appreciated, having a safety consultant who was more concerned with making money than providing work-related safety, and having ineffective and non-enforced country workplace safety and health laws (Jansz et al., 2020). Choueiri and Choueiri (2022) observed that a strong safety culture is the one that ensures that all safety processes comply with stringent regulations, to make safety a core value, not just a top concern. Gilding et al. (2002) mentioned that safe companies are an alternative approach to operationalising sustainability. Sustainable development has three pillars: economic, social, and environmental development. Culture has been added as being indispensable in achieving sustainable development. Jasiulewicz-Kaczmarek et al. (2022) suggested safety culture factors in an organisation from a sustainability perspective. For the benefit of organisations, six aspects for safety culture ecosystem are described, as above, such as organisational restructuring requirements, outline of safety culture concepts and methodologies, safety culture implementation data, highlights of safety culture progress, learnings of ONGC, and a case study of a chemicals company. Table 9 summarises the structural

and methodological essentials of guiding organisations towards building a safety culture ecosystem. Directors at the corporate board actively emphasise and support the company management, who in turn guide the HSE and functional/operational heads to jointly form a steering team to drive the supportive safety culture down the levels, along with the involvement of all employees/contractors/other stakeholders. The heads of HSE frequently interact with the safety culture coordinators and observers. The senior management and steering committee members interact with coordinators/observers on the first and second of every month, through Zoom meetings, and they appreciate the best observers with the award/reward system. Before safety culture implementation, safety is like a police inspection. Safety culture training improves communication among line managers, engineers, supervisors, and safety officers, and the attitude of the workforce towards safety. Lazar and Chithra (2022) revealed that a major benefit of incorporating cultural elements is the sustainable behavioural change, so consideration of culture as a fourth dimension helps accomplish sustainable development.

Table 9: Structural Elements of Guiding Organisations for Safety Culture Ecosystem

- Directors at the corporate board actively emphasise and support the company management.
- Top management, HSE, and functional/operational heads jointly form a steering team.
- Steering team drives the supportive safety culture down the levels.
- Steering team involves all employees/contractors/stakeholders in safety culture actions.
- Directors/Management focus on the safety culture trends data and review its progress regularly.
- Top management's criteria for assessing roles of the structural elements of safety culture.
- Formation of safety culture experts' group to mentor/achieve the indicators of safety culture.

SEIL observed that safety is an indicator that we are making progress in changing our habits and mind-set across the entire group, and a core element for our sustainability. The implementation of behavioural safety culture was a major step forward in our safety management and it took a lot of

leadership and commitment from us to make it a success. We are working together to build a safety culture where everyone working here keeps a lookout for one another and this forms our second nature. Before implementation of safety culture, in 2018, the safe percentage was 72; later, our safe percentage slowly increased and the unsafe behaviours reduced. From the first to the fifth year of our journey, the safe percentage raised year after year, from 72% to 95%. The safety culture data are captured through mobile and desktop applications, both offline and online. The company is determined to set a benchmark among all peer industries, to remain at 100% safe behaviour (Personal Communications, 2022).

Most of the times, responsibility of the middle and lower levels are fixed; however, it is crucial to ascertain the criteria (mentioned below) to assess the company directors' and top management's role, to strengthen and fast-track the safety culture ecosystem (Lal, 2022).

- Are top management leaders a part of the behavioural safety culture steering team?
- Are they actively participating in monthly safety culture meetings?
- Are they conducting weekly observations for reinforcing spot-corrections?
- Are they rewarding observations of active observers every month at sites/plants?
- Are they appreciating HODs for their role in developing and increasing observers at sites/plants?
- Do they conduct mass-communication each month for employees/associates?
- Do they discuss the monthly improvement in behavioural safety culture score dashboard?
- Are directors focused on the overall quarterly performance of safety culture intervention?
- Are they concerned about which behaviours are frequently causing incidents?
- Are they reinforcing support, such as resources, spot-correction of safety barriers, reward, and recognising best practices across businesses?

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