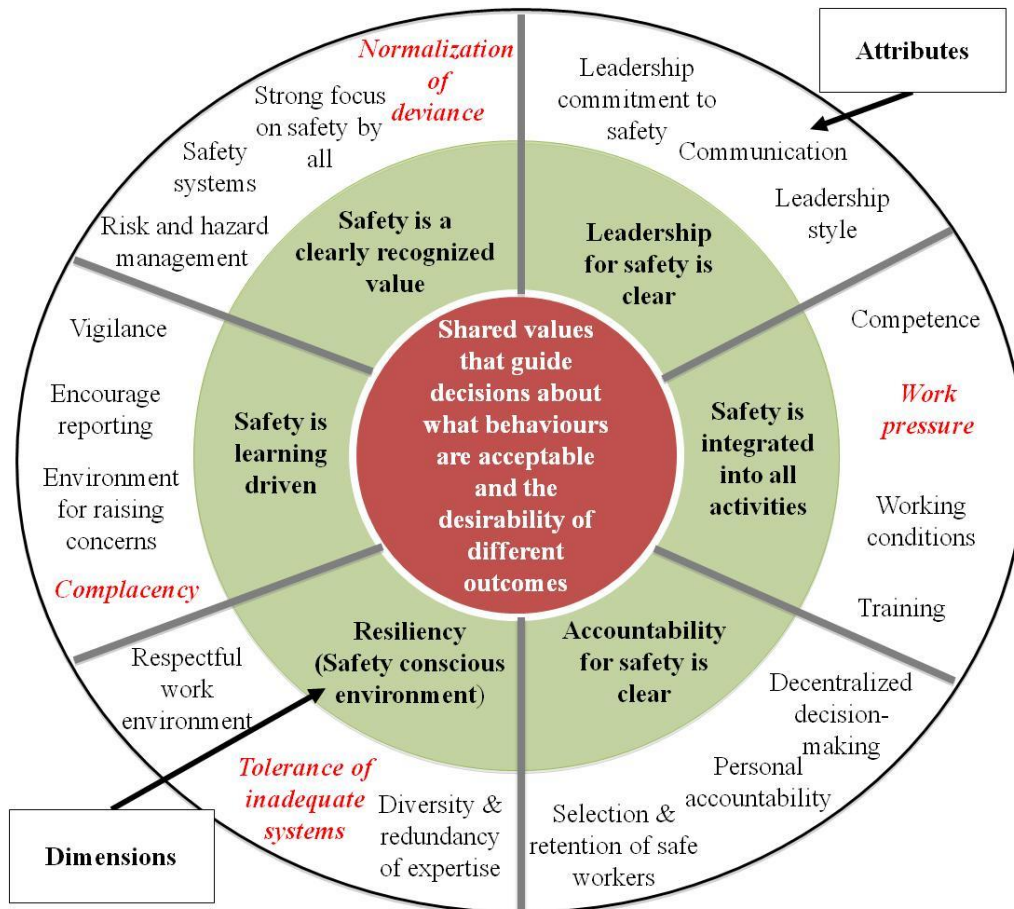


Safety culture composition

Safety culture is a complex concept and consists of many elements or dimensions, as it is reflected in a wide range of activities and behaviours. For example safety culture can influence both the likelihood that an employee will report an incident and that a senior leader will take quick action to resolve a safety concern. Safety culture influences the quality and effectiveness of all safety barriers. The broad nature of safety culture can be considered both a strength and weakness. The importance of safety culture is in part due to the fact that it influences all aspects of safety, but the broadness of safety culture also makes it difficult to understand and tie down. A number of conceptual models have been developed to help explain the nature of safety culture. Sadly the wide range of models has often led to confusion rather than increased understanding. Significant effort is often

expended in order to prove one model is better than others. Given the numerous competing models being promoted by regulators, industry groups and academics, it is important to understand how different models relate to each other. A recent review¹ compared numerous safety culture models and produced an overall summary model of safety culture (see figure below). The review identified 52 safety culture dimensions in the literature, of which 30 were unique. In order to create a summary model, the 30 dimensions were grouped by theme. This showed there was significant overlap in the different safety culture models and they could be covered by one comprehensive model. The resulting model is too complex to be used in practice, but does provide a comprehensive view of safety culture.

Safety culture summary model



Safety culture composition

This model separates out dimensions into two groups, the group in the inside (e.g. resiliency) are more abstract or higher-level than the dimensions at the outside (labeled attributes). This model illustrates the breath of safety culture. This model can be used to assess the extent to which other models are comprehensive and to identify the extent to which different models overlap with one another.

The dimensions in the vast majority of safety culture models are positively framed, that is they describe aspects of a positive safety culture. In these models it is assumed that a poor safety culture is simply the absence of a positive culture. There is some evidence that this is not the case, for example investigations into major disasters have been attributed to complacency and acceptance of rule violations, which are not adequately captured by the positively framed models. In Canada the National Energy Board and both offshore petroleum boards (CNSOPB, C-NLOPB) use a model that contains four positive and four negative dimensions. The positive dimensions are viewed as defences that protect against the negative cultural dimensions or threats. The four cultural defences are committed safety leadership, empowerment and accountability, vigilance, and resiliency. Four cultural threats are production pressure, complacency, normalisation of deviance, and tolerance of inadequate systems and resources.

Organisations should select the conceptual model that works best for their organisation. This may be based on the model that is used within their industry or a model that has been used in the past or by another part of the business. Alternatively, organisations may choose a model and is consistent with the terminology used within the organisation. Whatever model is chosen the organisation should be aware of the strengths and weaknesses of that model.

Safety culture models are useful when explaining what safety culture is and what a positive safety culture looks like. Safety culture models provide structure when attempting to assess the culture (see sheet 7 on assessment). It is important to be able to move from the abstract high-level dimensions such as “Leadership for safety is clear” to more concrete descriptions of workplace practices. This dimension contains three attributes, namely ‘leadership commitment to safety’, ‘communication’ and ‘leadership style’. Descriptions of workplace practices can be created for each of these three attributes. These descriptions will allow organisations to describe what a positive safety culture looks like. For example, the attribute ‘leadership commitment’ is reflected in systems and the behaviour of managers. In organisations where there is a high level of leadership commitment there will be clear systems specifying the safety leadership expectations for all managers, leaders will be aware of these expectations, there will be evidence of a high degree of compliance with these expectations and evidence of action taken when there is non-compliance. These descriptions enable organisations to assess their culture and to identify practical strategies to improve.

Key Points:

- Safety culture is a very broad concept and impacts all aspects of the management of health, safety, and environment.
- There are many competing models and there is no best or ideal model.
- The above model provides a comprehensive list of safety culture dimensions.
- It is important to select a model that helps explain the nature of safety culture, what a positive culture looks like and helps identify improvement strategies.

Safety culture composition

ⁱ Fleming, M. and Scott, N. (2013) A regulator's guide to safety culture and leadership. A report prepared for CNOSPB.