The Emerging Safety Mindfulness Model: From Concept Definition Into Requirements Collection

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Abstract: Advanced by Weick and Sutcliffe at the end of the 90ies, 'collective mindfulness' enables an organisation to cope with unpleasant surprises by having the collective mindset necessary to detect, understand and recover them before they bring about bad consequences. Although Weick's ideas on mindfulness are popular, they have proven difficult to implement. This is possibly because they have remained 'ideas' and principles rather than concrete proposals on how to support or even engineer better mindfulness into organisations. To overcome this gap, a novel 'safety mindfulness' model has been advanced to able to identify solutions to organizational safety across the whole organization in normal and non-normal operations. This paper illustrates the methodological approach that has been used to specify the model. The multiple case study design was used to produce detailed descriptions of the mindfulness phenomenon using theoretical statements and research questions to guide the collection and analysis of data in each case study. Further, it provided the background approach used to ensuring validity and reliability of the findings. Qualitative Content Analysis was used to support the design and application of a systematic process from the research design into the replication of results (i.e. relying on replication logic to provide external validation to the findings). The use of multiple sources of evidence supported data triangulation and consistency of results. Data recording and analysis was supported by NVivo (© QSR International). The case studies were applied in two distinctive organizations from the aviation domain – i.e. an Italian airline company and an ATC (Air Traffic Control) company based in The Netherlands. The case studies followed the same protocol for data collection, but tested two different implementation approaches. The user and functional requirements served to specify the underlying functionalities of the novel model. The model is expected to bring a positive impact on how the organization as a whole can mobilise its resources to identify, understand and respond effectively and adaptively to potential threats embedded in its operations and operational environment, influencing both how people approach their operational responsibilities and how the organization can reflect on, improve and change its systems.

Keywords: safety, multiple case study, mindfulness, qualitative content analysis, user and functional requirements, NVivo

1. Introduction

Safety mindfulness is a concept for reasoning about safety in an organizational context.

The concept of 'mindfulness' was originally developed as an individual concept in the psychological literature (Jordan et al. 2009) and it was transferred within the organisational literature by Weick, Sutcliffe and Obstfeld in 1999. They argued that High Reliability Organisations (HROs) derive their ability to successfully manage critical conditions of complexity, dynamism and error-intolerance from organisational mindfulness (Weick and Sutcliffe 2001, Weick and Sutcliffe 2007, Weick et al, 1999). Formally, the authors defined mindfulness as "*a rich awareness of discriminatory detail*" (Weick and Sutcliffe 2007, p.32). In any dynamic situation, safety is achieved by timely human adjustment. This adjustment is effected by organising processes that increase the operators' quality of attention. This increased attention, in turn, enhances operators' alertness to details of operations, thereby enabling them to detect subtle changes in contexts and respond as appropriate – a process of mindfulness (Weick et al, 1999). Mindful organisations are very sensitive to variations in their environment and continually update safety assumptions and perspective. Mindfulness is focused on a "*clear and detailed comprehension of emerging threats and on factors that interfere with such comprehension*" (Weick and Sutcliffe 2007, p.32). As such, collective mindfulness enables an organisation to cope with unpleasant surprises by having the collective mindset necessary to detect, understand and recover them before they bring about bad consequences. Mindfulness can relate to (1) identifying and mitigating the risks associated with a task in hand or about to be carried out; (2) a more future-focused approach on what could go wrong rather than the immediate threats. Both are about what is observed; what is the person's past experience; and about having sufficient knowledge to comprehend the current state-of-the-art and to anticipate what might go wrong (Joyner and Lardner, 2008). Mindfulness as a collective capability comprises five processes: (1) *preoccupation with failure* (regularly and robustly discussing potential threats to reliability), (2) *reluctance to simplify interpretations* (developing a nuanced understanding of the context by frequently questioning the adequacy of existing assumptions and considering reliable alternatives), (3) *sensitivity to operations* (integrating the understanding

into an up-to-date big picture), (4) *commitment to resilience* (recognising the inevitability of setbacks and thoroughly analysing, coping with, and learning from them) and (5) *under-specification of structure* (deferring to expertise rather than authority when making important decisions) (Weick et al, 1999, Weick and Sutcliffe, 2007). Safety is achieved through human processes and relationships (Sutcliffe, 2011). This mindful activity is "organizing" as it suggests that it is a continuing and dynamic process which comprises actions/behaviours in group settings. The social process is fed by extensive and continuous real-time communication and interaction by front-line operators (Weick and Sutcliffe, 2007). Currently the term mindfulness is not widely used in an operational environment, but phrases such as situational awareness or risk awareness – which are elements of mindfulness – are (Joyner and Lardner 2008).

Although Weick and colleagues' ideas on mindfulness are popular, they have proven difficult to implement, and so far there is no accepted measure of organizational mindfulness (Ray et al., 2011). This is possibly because they have remained 'ideas' and principles rather than concrete proposals on how to support or even engineer better mindfulness into organisations.

To overcome this, an integrated 'safety mindfulness' concept (McDonald et al, 2015) has been advanced. The proposed approach comprises different aspects which support both the operational, supervisory and middle management layers to better understand the system they work in, and share safety knowledge-based information. This includes the mindfulness principles following the work of Weick and colleagues (1999, 2007, 2012), and additional mindfulness aspects, consisting of a (1) 'shared situation awareness' model (Endsley, 1995, Salmon et al., 2008, Stanton et al., 2006), (2) 'temporal and specificity aspects', and (3) 'learning cycles'. In relation to (1) collective mindfulness is about being proactive, about having the best and most up-to-date information when carrying out the task. It is about having shared situation awareness in teams. Necessary situation awareness aspects include (a) looking ahead to the future and anticipating events, (b) monitoring and diagnosing the present, (c) deciding and acting, and (d) learning from the past. In relation to (2) to promote a collective mindfulness within the organization possible approaches of knowledge building can be undertaken – i.e. top-down, bottom-up and horizontal approaches. These approaches have the high-level objective to expand knowledge and situation-awareness within different layers of the organization, to improve the information flow between the units/departments, the system efficiency, and ultimately to leverage change for improved safety performance. Finally, (3) several temporal and specificity layers can be distinguished. At the operational level transmission of safety information can be very fast, ranging from real-time to within several days, e.g. telling colleagues immediately, during a break, at the end of a shift, or when they next come on shift. Such information has immediacy, is highly contextual, and is understood by those who receive it. At middle management level, information from operations is weighed in terms of its importance and its specificity, and it may be transmitted back down to ensure that all relevant operators are aware. This process typically takes anything from several days to a month. At the upper management level, the information is analysed and judged in the context of an overall risk picture. The feedback to operations, mediated through the middle layer, is typically in the range of months to years.

The so-defined integrated 'safety mindfulness' concept needed to move from principles into concrete proposals on how to support or even engineer better mindfulness into organisations.

The current paper presents only the research undertaken to support the specification and definition of the 'safety mindfulness' model.

2. Research questions and purpose of the study

The present research describes the stages undertaken to generalize from the 'safety mindfulness' theoretical assumption/principles and collect requirements able to specify the model. .At this stage the research did not apply/test the model in real-world organisations.

The over-arching research questions included the following: *How can we support the implementation of an "organizational/collective" Safety Mindfulness system? How can we support the sharing and retrieving of useful information and data to successfully mitigate/avoid incidents and accidents within when most needed within aviation organisations?*

A multiple case study method has been used. The field research involved two organisations from the aviation domain: (1) an Italian airline company, and (2) an Air Traffic Control company based in The Netherlands. Both responded to the same overriding research questions but included specific questions, which took into account the peculiar context of the case study, and the specific problem area of the intervention.

3. Building a multiple-case study design

The case study method (Gerring, 2007, Simons, 2009, Yin, 2009, Yin, 2012) was used to research the instances of the mindfulness phenomenon in its natural context and from the perspective of the participants involved in the phenomenon. The case study method can involve *single* (N=1) or *multiple* (N>1) cases. One of the strength in using a multiple case study design is that it can examine complementary facets of the main research questions, and eventually test the conditions under which similar findings are achieved, and can be *replicated*. In relation to 'replication', in multiple case studies the cases can be selected to predict similar results (direct replications) or to predict contrasting results but for anticipatable reasons (theoretical replications) (Yin, 2012). Since multiple case studies rely on analytic (i.e. to generalize to 'theoretical propositions') rather than statistical (i.e. generalise to 'population') generalizations, each case served to collect requirements to specify/operationalise the Safety Mindfulness model. The 'theoretical propositions' guiding the research referred to the principles and underlying characteristics of the preliminary safety mindfulness concept (McDonald et al., 2015) (see Appendix 1: 'Safety Mindfulness' theoretical propositions/research questions).

The field research was undertaken in 2016, over a six-month period. Overall, a qualitative research strategy was used. Both case studies involved in-depth interviews (i.e. five in Case Study (1), and thirteen in Case Study (2)) one workshop in each, multiple observations on site and documents analysis.

4. Ensuring research validity and reliability

Critically, to support the above, a Qualitative Content Analysis (QCA) method was used. QCA is a research approach '*for making reliable and valid inferences from qualitative material to the context of its use'* (Bengtsson, 2016, Krippendorff, 2013, Schreier, 2012). The approach follows a systematic procedure that traces down all the research steps undertaken from the design planning, data collection, recording/analysis, into the data reporting.

In the multiple-case study the research steps were drawn on the pre-defined 'safety mindfulness' theoretical propositions/research questions (see Appendix 1). A 'protocol' for data collection was designed. It contained the references to the sources of evidence (and outline of the related schedules), the procedures and general rules to be followed during the data collection in each of the case studies identified (see Appendix 2: Protocol). The empirical material was interpreted through the use of categories from a concept-driven 'coding frame' (Schreier, 2012) that relied on the safety mindfulness approach principles/components) and key-literature (e.g. Lekka, 2011) (see Appendix 3: Coding frame). NVivo (Version 11 Pro for Windows, ©QSR International), a Computer-Assisted Qualitative Data Analysis Software (CAQDAS) (Bazeley, 2007) was used to support the recording, codification and analysis of the empirical material (Grbich, 2013).

proposes the process that has been developed to support the above. The process design is the result of former research undertaken by the authors (Cahill and Callari, 2015, Callari, 2012), and of systematic literature analysis (Bengtsson, 2016, Krippendorff, 2013, Grbich, 2013, Schreier, 2012). In particular, four tests and 'case studies tactics' (Yin, 2009) have been used to judge the quality of the research process used. NVivo (Version 11 Pro for Windows, ©QSR International), a Computer-Assisted Qualitative Data Analysis Software (CAQDAS) () was used to record, code and analyse the empirical material (Bazeley, 2007, Bazeley, P. and Jackson, K. 2013).

Two independent researchers coded the saved empirical material, and analysed it. In each of the case studies undertaken, the coding frame considered and included new categories and sub-categories emerging from the empiric material. The data analysis supported the assessment of level of convergence in relation to the key concepts explored. To assess the validity and reliability of the findings, the 'inter-rater reliability' was run in NVivo. This allowed to calculate for each case study the Kappa coefficient. In both case studies the Kappa coefficient was in-between 0.64 and 0.73.

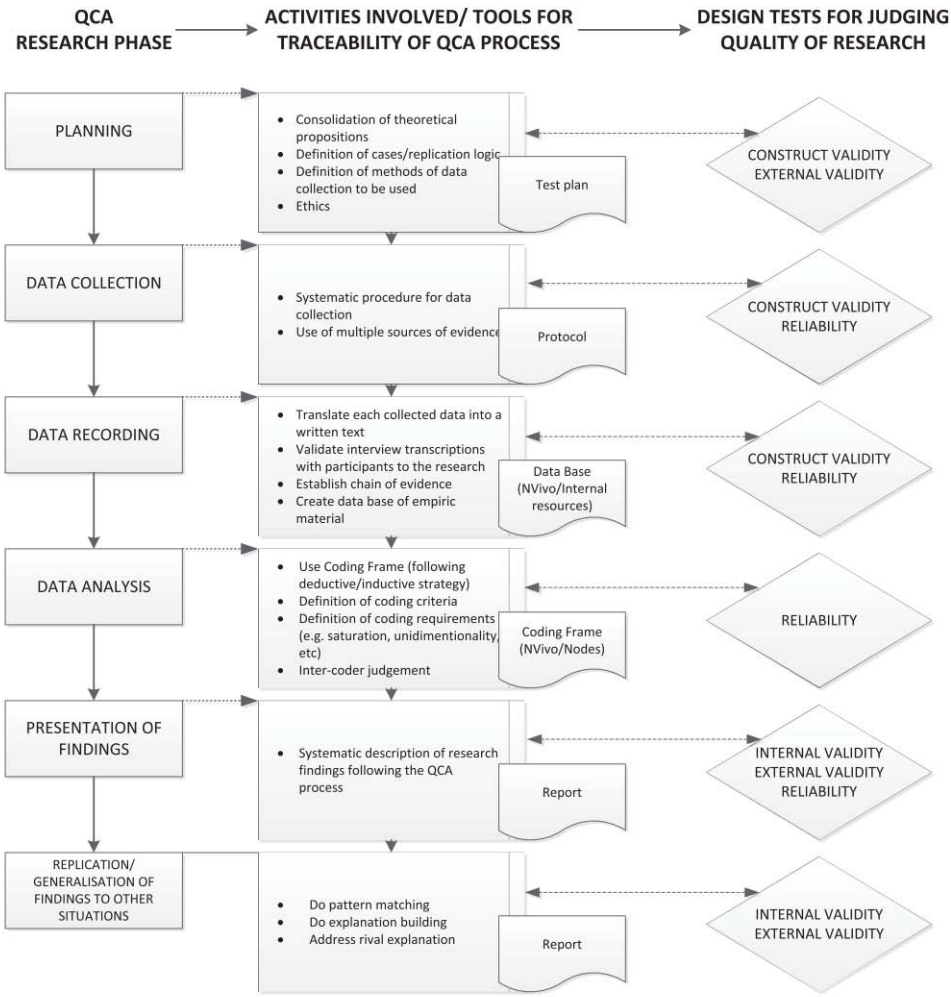

Figure 1: Criteria used for judging the quality of research

5. Findings

The outcome of the field research conducted in both case studies was twofold: from the one side, it provided a picture of the current 'Safety Mindfulness' in place in both organisations, assessing the way safety procedure and processes are advanced, the extent to which weak signals are recorded, and analysed, and the best practices/recommendations implemented, the quality of the information flow. From the other, it supported the collection of user and functional requirements to specify the safety mindfulness model.

Case study (1) showed how the organizational issues or "safety stories" about follow-ups after safety event reporting are not managed or taken into consideration appropriately as shared knowledge about safety, The feedback on results about implementation of solutions is quite limited and not shared across functions for review and further evaluation. Safety mindfulness cannot be shared. The generation of representative stories (as lessons learned) based on event occurrences is not occurring or is not supported. There is no evidence of mindful operations working across functions, which are capable to support and deliver safety mindfulness. This seems to be linked to a lack of trust and collaboration across departments.

Overall the results suggests that the company could approach safety mindfulness by introduction of improvement initiatives which, preliminary in one part of the company like Ground Operations, would re-establish an improved collaboration and coordination within and across functions. This can be triggered by facilitating and coaching the organization towards enhanced social relationships, whether bottom up, top down or lateral relations.

In case study (2) the ATC organisation showed to have strong and systematic systems in place, able to support the collection and analysis of a number of events/occurrences and incidents occurring in the Ops room. Further,

specialists within the organisation are trained to deal with all safety-related events and address them. The flow process is traceable and systemic, but the way it is currently designed does not support the leverage of collective mindfulness knowledge. The information flow process is designed to respond specifically to the controller, but is less clear when the outcome from the technical group is shared to a larger group of controllers. Overall, due to a change in the roster and fewer formal training events, controllers seem to have less formal opportunity to meet and share critical incidents than happened in the past, collectively share the safety implications, and therefore 'build' a collective mind. More and more new information, procedures, processes are communicated to the ATCO via the different means in place. Hence, most is left to the 'individual' to address possible unclear aspects, or to form a practical operational knowledge. Further, the Safety Data-Base in place has been designed to support the Incident Investigator office to make analysis, and not for the ATCOs to learn from the past/others' experience.

The findings supported the specification of user and functional requirements (see Table 1 below).

Table 1: Example of user and functional requirements

Case #	User Requirement	Functional Requirement
Case Study (1) Case Study (2)	The user should be able to retrieve independently past safety events from a Safety Data Base in the Ops Room using queries of intuitive access. … etc.	The daily safety information provided to the controllers should mainly be visual, so to be easily memorised. The safety flow of information should be accountable to all the relevant stakeholders The improved safety procedures should be collectively shared … etc.

The requirements were grouped based on the main underlying theme. New categories/dimensions were formed, to advance a model able to infer the optimal conditions for decision and action, both directly within operations and in projects to improve the operation in the future. These were inferred also by literature analysis and previous research. Hence the proposed model was designed using a bottom-up (based on the actual needs of the organisations) and top-down (trying to derive basic design principles of how organisational mindfulness could operate) approach.

'Safety Mindfulness' concerns creating the optimal conditions for decision and action, both directly within operations and in projects to improve the operation. This is both the source of enhanced *value* and of *accountability*. This is a collective activity that mobilises the resources of the organization to sustain and improve its operations. At an organizational level mindfulness is not *just the aggregate of the mental orientation of all its members. It requires showing how the organization as a whole can mobilise its resources to identify, understand and respond effectively and adaptively to potential threats embedded in its operations and operational environmen*t, influencing both how people approach their operational responsibilities and how the organization can reflect on, improve and change its systems. This model is illustrated in Figure 2.

One way of describing this model is in terms of a process, a mechanism and an outcome. Taking these in reverse order, the outcome concerns the value produced – the creation of mindful and improved operations. The mechanism concerns the way in which information is produced, circulated, transformed and put to work. The process is the sequence of activities and stages through which an initial state (e.g. identification of a problem) is transformed into the final state (the implementation of a successful solution). Value is defined in terms of improved and more reliable system performance. There are actually three levels at which value can be described: each successful improvement initiative delivers its own potential value; the reproducibility of successful change initiatives creates a sustainable value that derives from the embedding of the process and its information flows in the social organization; this in turn creates a knowledge base that creates the capacity to speed up the learning – reflecting on what has worked in the past together with more profound knowledge of how the system functions can enable more powerful solutions implemented more effectively. This is a kind of 'double-loop learning' (Argyris and Schön, 1996). The aim is to enable an exponential virtuous cycle of value creation. Closing the loop of action or implementation in this way is what demonstrates value from an improved operation – greater reliability, functioning more effectively. This value may be expressed in terms of safety, but equally it is applicable to dimensions of quality, cost of service, environmental impact etc. In fact this approach

lends itself to an integrated strategic risk management framework in which all significant risks to an operation are analysed and prioritized; potential conflicts and synergies can be addressed; responsibility for agreed programmes of action can be allocated, with clear accountability for the outcome being realized in due time.

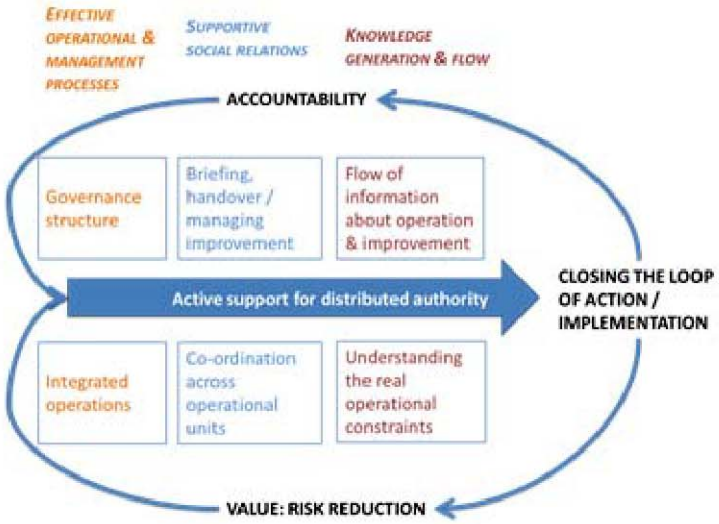

Figure 2: The emerged safety mindfulness model

Two principles govern the management and transformation of that information – *relevance* (a mechanism for managing large amounts of information) and *leverage* (the means of transforming that information into knowledge about how to change the system). In a complex information-rich environment, it is necessary to find a way of sorting and distributing a mass of information without overwhelming people with information overload. The principle of *relevance* applied here involves the location of each action sequence or initiative clearly within the appropriate operational context, which either gave rise to it or is germane to the processing and resolution of the problem. Of course this relies upon the availability and integration of data streams from planning to operations that define that operational context appropriately. This then governs the feedback of information to where it is most appropriate. *Leverage* concerns the capacity to progressively transform knowledge about a system from identifying a problem to proposing a solution, to planning how to implement that solution, to reviewing and verifying how that implementation has worked. Each stage of that transformation can bring in new parameters and considerations. Only in very simple problems do problem, solution and implementation match up as a single transformation of the problem space. For most socio-technical issues, the necessary transformation involves making tacit knowledge explicit in order to understand the process from different points of view and to maintain mindfulness about core principles of how the system operates. Making this knowledge explicit is an essential basis for knowing how to change a system.

These principles – relevance and leverage – seek to resolve the paradox of recognizing complexity without sacrificing efficacy. Seeking to understand the complexity of operations maximises the flow of information. It is impossible to model all this variance, but it is possible to contextualize it in the operational activity that produced it, thus making it tractable.

6. Discussion

The case studies served not only to describe the current needs of the organisations by collecting their requirements; they represented also the context in which the model will be applied in the second phase of the research to leverage the proposed changes, to improve the operations and safety conditions.

In both case studies, the leverages to generate more information/knowledge about variance in the operational system were highlighted. In aviation, as in many other operations that carry significant risk, those risks are not specific to any one organization. As processes are shared, as multiple services are delivered across a core process (e.g. a flight operation) so the risks are shared risks according to the interdependencies across those processes and services. Collaboration along shared processes creates the basis for managing shared risks in an integrated way across an extended enterprise. Further, both case studies showed that the strongest flows of information in relation to safety and risk are mostly towards the administrative centre, with weaker (or non-existent) feedback loops back into the operation, and those feedback loops that do exist are not tailored to the specific

operational situation currently being encountered. It is often difficult to share data and information across organizational departments – these can function like silos for collecting and storing data with less emphasis on transforming that data into useful information for sharing. The operational people need to share information with their peers, transform the information into collective knowledge. This process should be supported by a system, able to record and query for useful safety information during the work operations. Any information that has implications for safety is of course of direct concern to the safety professionals in the organisations concerned. They must be clearly in the loop of the flows of information, which should enhance institutional accountability for safety. Safety and improvement are shared concerns running across technical departments (safety, quality), operational departments (operational staff, management staff), planning and others. Any intervention needs to be in the context of the scale of the operation. Any solution has to be able to work for an organization of many hundreds or many thousands of employees. Optimally it should also reach across organizational boundaries where there is shared operational activity and hence shared risk.

The model will be the conceptual and functional framework to guide the second 'transformation' phase of the research. During this stage, the model will be further operationalised to test its implementation in both case studies.

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Appendix 1: 'Safety Mindfulness' theoretical propositions/research questions

#	THEORETICAL PROPOSITIONS	DIMENSION ADDRESSED
1	The more the recommendations/best practices from the actual working conditions and work-as-done in everyday operations are in place, the more is the likelihood of supporting the organisational collective mindfulness Learning from situations/events which led to a failure or a success supports the creation of a safer mindful place By 'grasping' every variation in the environment, different interpretations can be given in relation to the specific situation/event presented and enable the developing of a nuanced understanding of the context. This supports a "clear and detailed comprehension of emerging threats and on factors that interfere with such comprehension". … etc.	The five mindfulness principles and underlying dimensions
2	SSA is in place when operational people are able to look to the future, and anticipate events – novel demands, new conditions, possible threats. SSA is in place when expectations about future events are communicated and collectively shared SSA is in place when operational people are able to understand and monitor what is currently happening in the context SSA is in place when appropriate communication/information tailored to the particular circumstances is spread between the different organizational layers to create informed collective mindfulness. …etc.	Promoting Shared Situation Awareness (SSA)
3	At operational level, the transmission of safety information has immediacy, is highly contextual and is understood by those who receive it. The process takes from real-time information to within days At middle management level, the transmission of safety information from operations is weighed in terms of its importance and its specificity, and it may be transmitted back down to ensure that all relevant operators are aware. This process typically takes anything from several days to a month. At top management level, the information is analysed and judged in the context of an overall risk picture. The feedback to operations, mediated through the middle layer, is typically in the range of months to years.	Temporal and specificity aspects

#	THEORETICAL PROPOSITIONS	DIMENSION ADDRESSED
4	Knowledge building to promote collective mindfulness can involve top-down, bottom-up and horizontal approaches. Top-down, bottom-up and horizontal approaches support information flow between the units/departments, the system efficiency, and ultimately to leverage change for improved safety performance.	Learning cycles

Appendix 2: Protocol

#	SOURCE OF EVIDENCE	GOAL
1	Semi-structured interview	The interview schedule should contain topics of investigation which will enable: To understand how operators construct and maintain joint and coordinated actions through a common understand of the situation at hand. To understand how to collect the 'intangible' expertise of the individual, and make it ' collective' – i.e. pass this knowledge onto the colleague, experts from different shifts To understand how to share this knowledge to form a 'core base' to enable the operators anticipate and manage critical events Techniques/methods undertaken/considered in the interview schedule, to support the elicitation of tacit knowledge (Joia and Lemos 2010, Nonaka and Takeuchi 1997, Nonaka and von Krogh 2009). Instructions to One's Double (Callari 2012, Oddone 1984, Oddone and Re 2002, Oddone et al. 2008) Critical Incident Technique (Butterfield et al. 2005, Flanagan 1954) Overall, use of descriptive methods (Falzon 2006, Mollo and Falzon 2004, Montmollin (de) 1999, Vicente 1999) to understand the in-depth system variances of intrinsic work constraints, and where to leverage change, to improve the system ability to promote collective mindfulness
2	Observations	The observation schedule should contain topics of investigation which will enable: To understand how operators construct and maintain the social and cultural fabric of the system through the cooperative and coordinative 'talks' To understand how this information is shared, and becomes a 'collective mind'
3	Workshops/Focus group	The schedule should contain topics of investigation which will enable: To understand how flow of information is enabled within same layers/between layers / how this is facilitated / when this is hindered To understand how different tools can be merged/integrated to provide an overall picture of the safety issues tackled in the organisation To understand what features/ format a possible tool should have/ how to use it, etc.
4	Tools analysis	To analyse current tools in use
5	Documents	Documents produced

Appendix 3: Coding frame

CATEGORY	SUB-CATEGORY	DESCRIPTION
SAFETY CULTURE	Organisational Culture	Values and behaviours promoted in the organisation Just culture. Encouragement to report without fear of blame
	Individual/collective mindset	Focus on the individual – how safety is developed, and challenges are addressed,
	Accountability	The extent to which the different stakeholders are responsible/accountable for their actions within the organisation
CONTAINMENT OF UNEXPECTED EVENTS	Deference to expertise	Deference downward to lower ranking members of the organization The way in which decisions are supported The way in which feedback from different decisions are shared
	Oscillation between hierarchical and flat/ decentralised structures	How safety-problem solving/decision-making is advanced within the different organisational layers

PROBLEM ANTICIPATION	Preoccupation with failure/success	Pay attention to weak signals that may be symptoms of larger problems within the system; pay attention to factors/aspects that supported success stories. Report failures/success stories Support recommendations of all events, which may feed a share information collective mindfulness system Regularly and robustly discussing potential threats to reliability. Assess own failures Pose questions- ex. Reasons cognitive questions re failure which might occur at the human-system interface. Speaking up and share information Anticipate and specify significant mistakes that they don't want to make.
	Reluctance to simplify	Ability to grasp variation in the environment and see specific changes that need to be made Ability to recombine existing knowledge/ skills/ abilities into novel combination, to register and handle complexity
	Sensitivity to operations	Constant interaction deepens people's understanding of the interdependent workings of the complex system itself. This support people cope more effectively with unexpected surprises. Interdisciplinary and interdepartmental activity
LEARNING CYCLES	Technical training	Formal opportunities to learn from past actions/technical aspects of the work. Formal organisational learning paths
	Organisational communications (top-down)	Formal communications provided from the organisation to the operational people, with an aim to inform/learn Procedures reviewed in line with knowledge base
	Informal settings	Informal workshops/moments where to share experience, information, knowledge
MINDFUL LEADERSHIP	Engagement with front-line staff	Actions to promote engagement with front-line staff
	Investment of resources	Resources invested by the organisation to promote safety initiatives
INSTRUMENTS/TOOLS TO SUPPORT MINDFUL KNOWLEDGE/ FLOW OF INFORMATION	To feed-in	Tools and procedures to enable the recording and analysis of safety-related issues
	To feed-back	Tools and procedures to enable the extraction of safety-related issues/ best practices

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