

Do non-jeopardy / just culture confidential reporting systems guarantee active learning?

Introduction

The title of the essay asks if non-jeopardy / just culture confidential reporting systems are a guarantee for active learning.

To answer this question, Toft and Reynolds (2005) are used to clarify what the characteristics of active learning are and what is needed to meet these characteristics. On the other hand Dekker (2009), Douglas (1994), Marx (2001) and Reason (1990) help to explore the concept of a just or a non-jeopardy culture. The idea of confidential reporting systems as an instrument to convert culture into active learning is finally considered on studying the work of Barach and Small (2000), Dekker (2009) and Leape (2002).

While these explanations help to better understand the terminology used in the essay title, three essential theories are considered to illustrate specific challenges of the just culture and active learning discourse. The theory of social constructionism as explained by Berger and Luckmann (1967), Burr (1995), Elder-Vass (2012), Hacking (2000), Searle (1995); the discourse about risk acceptability as discussed by Fischhoff *et al.* (2000), Foster (1996) and Macpherson (2007) and the concept of complex adaptive systems as explored by Holland (2006), Lansing (2003) and Miller and Page (2007) are used to inform the argument presented in this paper: Applying a just culture and the use of relevant instruments such as confidential reporting systems can do favour but not necessarily guarantee active learning. Both a just (or any other) culture as well as institutionalised active learning implies multi-layered social construction and an unaffiliated learning aptitude, which can actually hinder active learning.

The essay starts with the conceptual framework that explains the relevant terms and discusses the chosen theories in conjunction with the question to be answered and the presented argument. The paragraph is followed by a brief overview of case studies, which are used in the

analytical section to better illustrate the argument. The discourse is finally closed on considering implications for a just culture and active learning that takes account of the challenges presented in this essay.

Conceptual framework

Having outlined the general direction and structure of the essay, the main terms shall be analysed and the related theories debated in details. To explain the nature of a non-jeopardy / just culture (herein after referred to as just culture) a definition given by Reason (1990: 5) can be helpful as starting point: Reason notes that intention and error can not be separated. This implies that no human error can be defined or judged without considering the intentional behaviour. It is this intentional behaviour that in fact uncovers the real cause for an occurring error. Douglas (1994: 5-6, 17) on the other hand notes that we did not really advance from ancient tribes who either blame the victim itself, a rival or an enemy for errors because we cannot accept a concept of misfortune, which would imply that we are living in a world that is uncontrollable. She claims for a no-fault approach: On compensating aggrieved parties adequately without assigning the error to an identified guilty, we could find a way out of ancient patterns of behaviour. It is obvious that such a no-fault approach brings significant questions along: What, as an example has to be the adequate compensation for loss of life by medical mistakes? Reasons' reference to the importance of intentional behaviour and Douglas' explanation about our deeply rooted implicitness to blame encounters well the intentions of a just culture, which tries to overcome blaming and with that seeks to reduce the possibility of future errors. The protruding characteristic of a just culture is that errors are accepted, but not all kind of it. As Dekker (2009: 177) puts it: "A just culture is meant to balance learning from incidents with accountability for their consequences". This is where one lands again at the starting point. To define the accountability it must be known more about the intentional behaviour (Reason, 1990: 5), which is distinguished by Marx (2001: 5-7) in human error, negligent conduct, reckless conduct or intentional rule violation. While the first one is agreed on having no culpability, the others are seen as to be of ascending culpability. But this classification poses a major problem, that Dekker (2009: 177) expresses with the question of who is the one to draw the line between acceptable and unacceptable behaviour. The

judgment of what is culpable is always socially constructed or as it is put by Douglas (1994: 41): Culturally biased by the one who is judging.

This constraint describes exactly the core problem of just culture reporting systems. Safety relevant incidents may not be reported because they are not registered as such. Or they might not be reported because there is anxiety that the behaviour is judged as to be not acceptable. On establishing a reporting system that is confidential as this is proposed in the essay title, one of the requirements for success of any reporting system for adverse events is already achieved (Leape, 2002: 1636). While Leape (2002: 1636) mentions as further characteristics a reporting systems' non-punitive, independent, timely, systems-oriented, responsive and expert assessed orientation; Barach and Small (2000: 762) explain that a reporting system has to balance barriers and incentives to report on an individual, organisational and society level. This notion is especially interesting regarding cultural barriers: While on an individual level an unwritten code of behaviour in a specific profession can be a barrier to reporting, it can be a bureaucratic or ignorant culture on the organisational level or the lack of trust towards an organisation, branch or individual on the society level. If these barriers effectively shall be eliminated, different incentives have to be offered. Dekker (2009: 178) brings up an interesting question regarding barriers and incentives: Does it not mean that anything goes if nothing is punished? And would this not imply that reports are useless anyway? This leads back to the starting point for the second time. To define accountability we need to know if an adverse event roots in a human error, negligent conduct, reckless conduct or intentional rule violation (Marx, 2001: 5-7). Before this notions regarding accountability can be discussed in the light of social constructionism and the theory of risk acceptability, the theory of active learning has to be introduced in the following.

Active learning is explained as part of Toft and Reynolds discussion about general and specific organisational learning (2005: 65-114). Active learning is described as a type of learning that does not only recognize deficiencies, but takes immediate action to remedy shortages and therefore enables active foresight. Toft and Reynolds later on explain that active learning implies that a working feedback system is in place, which continuously compares the socio-technical systems' output against pre-set goals (2005: 89). To achieve the desired output of active foresight, specific internal and external inputs are required. These requirements are

identified as to be foresight (coming from hindsight) and safety by compulsion as external input and the availability of information, the possibility of implementation of regulations and the correct initial interpretation of the situation as internal input. What does this mean regarding a just culture and confidential reporting systems? Do they fulfil the requirements and allow or actually guarantee active learning? Certainly a just culture and appropriate reporting systems support for example the recognition of deficiencies, the availability of information and the implementation of correcting actions. But a just culture does not guarantee that the initial interpretation of a situation is correct. As an example: Considering a nurse who dispenses the wrong medicament. She is reporting this failure on arguing that the medicament label looked like the label of the medicament she should have given. Her behaviour is judged as to be negligent, nevertheless an action on the system level (e.g. an improved labelling system of the medicaments) is taken to correct this deficiency from the expected output (which would be that 100% of the medicaments are given to the right person). But this does not mean that the interpretation of the initial situation was correct. It might have been that the nurse dispensed the wrong medicament because she was under pressure and tired. This would change the appropriate action to be taken and should actually as well rise concerns about the pre-set goals, which are probably the wrong ones. It might be the more efficient way to avoid failures if the system defines the pre-set goal as to have 100% of its nurses not working under pressure. Not only is the potentially wrong interpretation of the initial situation a disadvantage of a just culture, the potentially ineffective goal-setting is a concern that has to be raised for the concept of active learning as well. While the theory of social constructionism (Berger and Luckmann, 1967; Burr, 1995; Elder-Vass, 2012; Hacking, 2000; Searle, 1995) can help to explain this restriction to a just culture as well as to active learning, the theory of complex adaptive systems (Holland, 2006; Lansing, 2003; Miller and Page, 2007) needs to be considered to keep in mind another limitation of either a just culture or active learning: Any system of a certain complexity tends to learn autonomously and the control of what is learned and why is a major challenge. But before moving to these theories, the findings so far shall be summarized.

It was explained that a just culture intents to balance accountability with learning. It was also illustrated that this is particularly challenging as there must be a definition of what is acceptable as behaviour and what is not. It was also explained that the success of confidential reporting systems are influenced by the anxiety of what is judged as acceptable or non-

acceptable behaviour. Furthermore it was illustrated that a confidential reporting system does not mean that all safety relevant incidents are reported, as they may not be recognized as such. It was finally discussed that active learning requires the correct interpretation of an initial situation and the comparison of a systems' output against pre-set goals. This both implies specific concerns for the effectiveness of just culture regarding active learning: If the initial situation is not interpreted correctly and the pre-set goals are built on irrelevant indicators, lessons might be learnt, but probably not the right ones.

The theory of social constructionism is explained by Burr (1995: 2, 10) as a critical position we take towards our taken-for-granted view of the world. She further notes that the truth, common sense or knowledge – fundamental elements our behaviour and judgement of it is based on – cannot be taken as given facts but stand for prevailing power relations. Berger and Luckmann (1967: 150-166) explain that the identity of every individual is built on the process of externalisation, objectivation and internalisation. This means that what an individual experiences on interacting with the world, is considered as to be the truth in its eyes and contributes to the identity of the individual. Identity and behaviour of an individual therefore has always to be considered as socially constructed. The complicating factor is that according to Elder-Vass (2012: 74) and Searle (1995: 51), this is a two-way process. Not only the individual must be understood in its relation to 'the world', the world must also be considered as to be dependent on individuals' interaction. Hacking (2000: 6-7) finally notes that once we accept the claim that everything is socially constructed we have to accept that everything could be constructed differently. So we have to accept that if the nurse says the medicaments are insufficiently labelled it might be true for her but not for others. Or it might even not be true for her but she does not say the truth, because she feels that it is not appropriate to say as everyone else must be tired too. On the other hand she might be judged to be accountable for negligent behaviour, but this judgement is probably based on the belief that the systems' pre-conditions can be made better instead of realising that the general fatigue of the nursing staff is the main problem. While the theory of social constructionism helps to understand how difficult it is to evaluate the real causes of adverse events, the discourse about risk acceptability enlightens an additional challenge in drawing the line between acceptable and non-acceptable behaviour (Dekker 2009: 178). Macpherson (2007: 379-381) notes that risk acceptability as well has to be considered as socially constructed, because not only type, quantity and probability of

a risk are considered but also the benefit of taking it, which is always a matter of subjectivity. It must furthermore be noted that cost-benefit analysis always lacks completeness as it is based on hindsight and consequences we know and experienced already (Fischhoff *et al.*, 2000: 123). Foster (1996: 159) finally explains the difficulty of determining the value e.g. of human life as one of the most important indicators for risk considerations. Hence how or who is going to decide over accountability if risk acceptability is subject to social constructionism and if even core indicators such as the value of human life cannot be measured objectively and adequately? The notion of a socially constructed world is striking in the sense that nothing anymore can be taken for granted. Before reconsidering these findings, a last aspect to be thought of shall be discussed. The concept of complex adaptive systems (cas) is explained by Holland (2006: 1-2) as the theory of " (…) systems that involve many components that adapt and learn as they interact." As main characteristics of such systems he adds parallelism, conditional action, modularity and adaption and evolution. Lansing (2003: 183), on discussing the work of Holland, notes that complex adaptive systems such as immune systems, cities or ecosystems function obviously without an institutionalised external control. Miller and Page (2007: 10) link these characteristics to the social world in which agents must continuously interact with other agents in the system. These interactions lead to an increasing tightness of coupling of the components (agents), that finally makes a system almost impossible to decompose. The concept of complex adaptive systems includes two implications for the discourse about just culture and active learning: First, any concept that aims to detect and eliminate deficiencies has to face the fact, that a situation where a an error occurred will not occur again within the same setting, because every system with a certain complexity is subject to continuous change and adaption. Hence the detection of causes and actions to be taken to avoid recurrence of a specific deficiency is difficult. Secondly, and as a consequence of the adaptation, the institutionalised corrective action might be wrong or even counterproductive as the system already resolved the problem. If, to take again the same example, the labelling of the medicaments is changed after the nurses' confusion, it must be considered that the corrective action can actually lead to more confusion. A new mistake might occur because something has changed that was generally well known and did not cause any problem respectively the nurses adapted and learned to deal with the practice in use. Was it now a real improvement leading to more safety or did it actually provoke the contrary (because the real cause for the adverse event was anyway the nurse's fatigue)?

The arguments given so far have shown that a just culture as well as active learning is subject to social constructionism and it is therefore not sure if the right lessons are learnt. It was also shown, that the discussion about accountability needs to be seen as culturally or socially biased and that on the other hand accountability needs a pre-set understandings of values, which is difficult to establish. We have finally seen that a just culture and active learning can run the risk of hinder a natural order of improvement on implementing correcting action that are counterproductive in a complex adaptive system. The next paragraph will use several case studies situated in health care environments to illustrate the importance of these theories for the claim initially placed: A just culture and the use of relevant instruments such as confidential reporting systems do favour but not necessarily guarantee active learning.

Health care systems – a rich source of case studies

While it could be an approach to analyse the subject of concern on using case studies situated in different branches, this essay focuses exclusively on case studies of health care systems as this eases the comparability of the findings and relevant examples were already used throughout the essay. The three chosen case studies to illustrate the relevance of the introduced theories are summarised among others in the work of Wolf and Hughes (2008). They analysed the results of 48 different case studies concerning error reporting and disclosure in health care systems and come up with some findings relevant for the argument presented in the conceptual framework. They notice that nurses are the occupational category in health care systems that are reporting most frequently and that the kind of incidents reported is dependent on what is understood as error and near miss. They also categorise the major barriers to reporting as to be a matter of fear or understanding; deficiencies in administrative, organisational or managerial responses or simply the perception of reporting as to be a burden of effort (Wolf and Hughes, 2008: 345-350). To study and link these findings with the relevant theories, the following case studies considered in the work of Wolf and Hughes (2008: 364-379) are chosen for further explanations:

The first case study to be analysed seeks to examine if differences in perception of wrongdoing affects the unveiling of unethical behaviour. King (2001) surveyed for this purpose 372 nurses in the Midwest of the United States.

The second case study to be considered is compiled by Cook *et al.* (2004) who examine the methods to recognise and assign medical errors. The study was conducted with 485 clinicians in 29 hospitals in 9 states in the United States.

The last case study finally investigates the barriers and motivators for error reporting in family medicine offices in the United States. The study conducted by Elder *et al.* (2007) includes a total of 139 medical and administrative staff employed in the offices.

The challenges of just culture confidential reporting systems and active learning

In this paragraph and on using the mentioned case studies, it shall be illustrated how social constructionism, risk acceptability and the theory of complex adaptive systems are challenging the concept of a just culture and active learning. It was explained in the conceptual framework, that active learning requires that initial situations are interpreted correctly and pre-set goals are built on relevant indicators. The implication of a just culture and confidential reporting systems cannot guarantee that this condition is met. According to the chosen case studies there is a general uncertainty among the surveyed staff over what actually constitutes an error and what should be reported (Cook, 2004: 32; Elder, 2007: 118). It is reported that repetitive, rare or errors perceived as not to be serious are likely to not be reported (King, 2010: 10; Elder, 2007:119) and that the reported errors concern ordinary mistakes such as medication errors or patient falls. Complex errors associated with diagnosis and treatments (and therefore in the responsibility of physicians) are unlikely to be reported (Cook, 2004: 36). How can these facts be understood? It was illustrated earlier that social constructionism helps to understand how difficult it is to evaluate the real causes of adverse events. The case studies disclose clearly that the professional guild of the nurses shares a completely different culture than administrative staff or physicians. They are much more likely to report errors, they feel responsible for their mistakes and for patient safety and they act upon a clearly established set of norms and rules

(King, 2001: 2, 10; Cook, 2004: 41). Their unwritten codex goes that far that they have a clear idea of intentional and unintentional wrongdoing and how this should be treated (King, 2001: 10). They tend to only report intentional wrongdoing while they handle mistakes coming from unintentional wrongdoing by themselves on addressing these directly with their colleagues. This implies that nurses expect an adequate reaction on their incident reports as they already pre-selected what should be announced, hence the nurses follow a socially constructed judgment of acceptability and accountability based on their professional ethics. The contrary seems to be true for the professional guild of the physicians (Cook, 2004: 36). Their culture clearly assigns the responsibility for patient safety to the nurses as well as they are hesitant to identify any errors in their area of responsibility on arguing that diagnosis and treatments underlay 'practice variances'. These findings confirm what was claimed earlier: What is reported as adverse event as well as what is judged as acceptable or not is based on a specific socially constructed reality. This is a fact no one can escape but the real issue is that this can lead to wrong interventions in a complex adaptive system. As it was explained earlier, the components inherent to such systems adapt and learn as they interact (Holland, 2006: 1-2). The tight coupling, which is a consequence of these interactions has specific implications for error management and learning concepts such as just culture and active learning: Reactions on deficiencies tend to be too late (as the system already adapted its behaviour) and therefore not adequate anymore (as the practice in use already changed). Evidence for this peril can be found in the study of Cook (2004: 36, 41) where the majority of the nurses confirmed that they have the ability to improve the care provided in their hospital. Nevertheless fewer than half of the nurses are participating in formal investigations and analysis of errors and only about 15% are invited to participate in institutionalised quality improvement processes. Additional proof for the learning aptitude of health care systems can be found in Kings' study (2001: 10) where it is explained that perceived unethical behaviour of co-workers is addressed directly by colleagues and only is reported if the individual fails to learn and change its behaviour. This implies that the expected reaction on the error report would address the subject of concern rather than establishing changes in procedures which might actually widely be accepted as to be adequate and no matter of concern.

The chosen case studies show that the willingness and need to learn from mistakes is not an issue at all. It is widely accepted and appreciated if organisations provide a learning

environment (King, 2001: 119; Cook, 2004: 35). Individuals participating in the study of King (2001: 119) also mentioned the perceived benefit from error reporting and noted that it is worth for them to report if adequate corrective actions help them to avoid future errors and if the reporting of errors relieve them from emotional disaffection of their own mistakes. This discloses another issue to be addressed regarding just culture confidential reporting systems and active learning: While error reporting systems seems to be used as one possible instrument to apply pressure in self-regulative, adaptive systems, it stands for a way out of emotional distress for individuals who did a mistake. The reactions expected are conflictive: While a complex adaptive system seeks to assign accountability on individuals and is able to correct the error with the mechanisms inherent to the system, individuals are looking for facilitations and improvements on the system level and personal relieve from blameworthiness. For the last time it has to be said again that these findings lead back to the initial starting point: Accountability needs a judgment of the intentional behaviour. But this judgment is socially constructed and differs whether one is the individual doing the error, the system the individual is working in or the body deciding over the accountability. Hence, corrective actions following reported errors can never serve all expectations. And the question remains: What is the expectation to be fulfilled to effectively support active learning?

Conclusion

The initial argument presented in the essay was that applying a just culture and the use of relevant instruments such as confidential reporting systems can do favour but not necessarily guarantee active learning. On using case studies situated in different health care systems it was illustrated that the concept of social constructionism, the question of risk acceptability and the theory of complex adaptive systems are raising significant concerns about the effectiveness of error reporting systems and the feasibility of active learning.

As one practical implication to improve reporting systems in place, it is therefore proposed to pay more attention to the different cultures (and with that to the different social constructions) inherent to the applying organisations and branches. As Cook (2004: 41) mentions, this could be done on fostering interdisciplinary peer groups, which discuss and decide on what is

considered as to be a reportable incident and what the corrective action is expected to be. The impact and effectiveness of the implemented corrective actions finally must be observed very closely and with the consultation of the aggrieved parties.

To finally evaluate if active learning really happens – with or without the above mentioned improvements – it is required to conduct more longitudinal research that focuses on error types and perceived causes. Only this can help to detect if implemented corrective actions effectively hinder mistakes to recur and if finally the right lessons are learnt.

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