

Error reframing: Studying the promotion of an error management culture

(Running title: Promotion of an error management culture)

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Abstract: In the organizational behaviour and organizational psychology literature, individual errors are considered either as sources of blame (error-prevention culture) or as sources of learning and something to be encouraged in order to promote innovation (error-management culture). While we can assume that a third perspective exists somewhere in between, error management is usually considered as the best solution. Yet scholars have tended to neglect the planned and directed transition from a pure error-prevention to an error-management culture. We thus examine to what extent and under what conditions an organization can culturally transform the representation of individual errors through its business leaders. To answer this question, we conducted a qualitative study on the case of a French insurance company. We portray a realistic image of the promotion of an error management culture, pointing out certain limitations and constraints, while nonetheless identifying some conditions for successful error reframing.

Keywords: error tolerance – error prevention – error management – error reframing

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Introduction

Individual errors made in organizational contexts have been the subject of many papers in organizational theory, including the seminal article by Edmondson (1999) on psychological safety. The issue is at the crossroads between organizational behaviour (OB) and organizational psychology (OP). Scholars in both fields have shown that organizations fluctuate between two radically opposed representations of individual errors (Dimitrova, van Hooft, van Dyck, & Groenewegen, 2017; Goodman, Ramanujam, Carroll, Edmondson, Hofmann, & Sutcliffe, 2011; Zhao & Olivera, 2006), implicitly reflecting the existence of two distinct organizational cultures (Rami & Gould, 2015; van Dyck, Frese, Baer, & Sonnentag, 2005).

In the first approach (error-prevention culture), individual errors are framed negatively, considered to be harmful to the organization. Organizations taking this view therefore avoid them at all costs, developing specific procedures, or carefully controlling their impact (Reason, Parker & Lawton, 1998). In the second approach (error-management culture), individual errors are not only perceived as unavoidable, but are framed positively. They are considered as precious learning opportunities and something to be encouraged in order to promote innovation (Frese & Keith, 2015). Some authors consider a third approach (a combination of both), where organizations first try to avoid errors, but if mistakes are made, they focus on learning from them. In this situation, individual errors are appraised in a more positive light than in what van Dyck et al. (2005: p. 1229) call the “*pure*” error-prevention approach (Dimitrova et al., 2017; Hofmann & Frese, 2011).

To summarize, organizations can be contrasted according to whether they adopt (or not) – at least in part – an error-management culture (as they do in the second and third approach), on the understanding that organizations often rely on error prevention only (van Dyck et al., 2005). In this last perspective (corresponding to the first approach), learning cannot occur because mistakes are blamed and stigmatized (Edmondson, 1999). In a more general way, the literature

in OB and OP highlights the virtues of the error-management culture in comparison to the pure error-prevention approach. The conclusions generally give error management the edge over pure error prevention in terms of beneficial outcomes (Dimitrova et al., 2017; Frese & Keith, 2015) linked to affect (Chillarege, Nordstrom, & Williams, 2003), motivation (Bell & Kozlowski, 2008), cognition (Keith & Frese, 2005) and performance (Nordstrom, Wendland, & Williams, 1998). In other words, authors agree that a positive representation of individual errors, as in the error management culture (pure or mixed), is largely in the interest of organizations. These studies thus implicitly call for a cognitive redefinition (Schein, 2010) of individual errors in the organizational context, *i.e.* the promotion of an error-management culture. And yet, to the best of our knowledge, no study has investigated a deliberately orchestrated cultural transition to this desirable error-handling model. Only a study on the normalization of failure – and not error – has come close to this topic, explicitly evoking the issue of “*reframing*” a failure as a learning opportunity (Shepherd, Patzelt, & Wolfe, 2011, p. 1236).

In other words, to date, the literature in OB and OP does not help us to understand the intentional cultural shift (Howard-Grenville, Golden-Biddle, Irwin & Mao, 2011) – planned and directed by prime movers like company leaders (Weick & Quinn, 1999) – from pure error prevention to error management (pure or mixed). While we know that cultural changes are generally challenging (Schein, 2010), we do not know, in the specific context of error tolerance, for instance, the conditions for success, the limits or the obstacles to the promotion of an error-management culture. We therefore attempt to fill this gap by seeking to understand how a deliberate cultural change in the representation of individual errors – from a negative view of errors to a positive one – can occur within an organization. More specifically, we highlight the conditions of this explicit transformation at both individual and organizational level, while exploring the limits of such error reframing. This paper therefore addresses the following

question: “*To what extent and under what circumstances can an organization culturally transform – through its company leaders – the representation of individual errors?*”

To answer this question, we adopted a ‘comprehensive research’ perspective. In other words, we sought to interpret the subjective meanings that underlie the behaviour of individuals – those who make mistakes and/or those who observe them – in the organizational context. Comprehensive studies generally provide contextualized research that furnishes detailed knowledge of a situation. We thus conducted a qualitative case study at the MAIF, a French mutual insurance company. 28 interviews were carried out with managers and non-managers working at the head office and in its network. Considerable secondary data were also collected, such as internal regulatory documents, support tools, internal and external surveys, and newspaper articles. The data were analysed using Gioia, Corley & Hamilton (2013)’s methodology in order to process our 593 original, empirically-based pages. In the end, our paper offers a nuanced view of the promotion of an error-management culture, at the same time highlighting the conditions under which such an approach is viable in the organizational context.

After reviewing the existing literature in OB and OP on error-handling and organizational culture, thereby justifying the theoretical interest of our research question (1), we present the characteristics of our qualitative methodology in detail (2). The results of the content analysis of our empirical data (3) are then discussed in order to highlight the main contributions of our study (4).

1. Literature review

1.1. Definition and categorization of individual errors

In this paper, we conceptualize error as an unintended deviation from initial expectations (Dahlin, Chuang, & Roulet, 2018; Dimitrova et al., 2017; Frese & Keith, 2015). While the

definition of an error is the same in most research, the representation of this error (negative or positive) is very different. Most authors also agree that errors cannot be due exclusively to circumstances beyond a person's control, *i.e.* they are potentially avoidable (Dimitrova et al., 2017; Keith & Frese, 2005; Zhao & Olivera, 2006).

In practice, three types of error can be distinguished. First, '*slips*' correspond to situations where individuals know how to achieve a goal but do not perform the actions appropriately. Second, '*rule-based mistakes*' happen when well-known rules or procedures are wrongly applied. Finally, '*knowledge-based mistakes*' occur when individuals lack the knowledge to correctly analyse the situation they are dealing with (Dahlin et al., 2018; Zhao & Olivera, 2006). In contrast, errors should not be confused with violations (*i.e.*: intentional non-compliance with a goal, a rule or a standard) or failures (*i.e.*: potential negative consequence of errors) (Frese & Keith, 2015; van Dyck et al., 2005).

The issue of errors has been widely discussed in the literature in OB and OP, both at individual (Keith & Frese, 2005; Zhao & Olivera, 2006) and organizational level (Goodman et al., 2011; Gronewold, Gold, & Salterio, 2013; van Dyck et al., 2005). However, in the present study, we focus on individual errors. In other words, we leave to one side situations in which the errors of multiple people within an organization may potentially lead to adverse organizational outcomes (Goodman et al., 2011). Instead, we adopt a more idiosyncratic approach, studying the organization's reactions to individual errors.

1.2. Error-prevention culture vs. error-management culture

Most organizations adopt an error-prevention culture and allocate blame for mistakes (van Dyck et al., 2005; Zhao & Olivera, 2004). In such a framework, errors are acknowledged as sources of stigma since they are widely seen as signs of incompetence, weakness and lack of intelligence (Edmondson, 2004; Nordstrom et al., 1998). More specifically, errors are treated as nuisances

which: interrupt the workflow, are time-consuming and costly, damage reputations, lead to loss of customers, generate negative feelings (*e.g.*: stress, frustration, fear, guilt, shame), diminish people's perceived self-efficacy, lower employee morale, reduce affective commitment to the organization, increase job dissatisfaction and turnover, and/or inhibit behaviour. Numerous organizations thus perceive errors negatively. Consequently, they focus on establishing norms, rules and procedures, and attempt to control employees' behaviour to try to prevent errors from occurring (Frese & Keith, 2015; Goodman et al., 2011; van Dyck et al., 2005; Zhao & Olivera, 2006). In such an organizational context, errors are highly likely to be subject to sanctions by managers (Goodman et al., 2011; Gronewold et al., 2013; van Dyck et al., 2005). Obviously, people working in organizations with zero error tolerance (Goodman et al., 2011; Guchait, Paşamehmetoğlu & Madera, 2016) are not encouraged to admit their 'unintended deviations' to their managers. Indeed, individuals who commit an error do not want to appear incompetent and do their best to protect themselves from the adverse consequences associated with deviating from a goal (*e.g.*: job insecurity, loss of career opportunities, peer rejection, loss of group or organizational support). This attitude is called "face saving" (Edmondson, 1999; Gronewold et al., 2013; Zhao & Olivera, 2006). It is not without consequence as it means managers are less likely to be aware of existing erroneous actions and of the circumstances leading to them (Uribe, Schweikhart, Pathak, Dow, & Marsh, 2002; Zhao & Olivera, 2006).

Conversely, in an error-management culture (Frese & Keith, 2015; van Dyck et al., 2005), errors are considered to arise from individual actions that cannot be entirely prevented and are thus unavoidable within an organization, especially in dynamic and changing contexts (Chillarege et al., 2003; Edmondson, 1996; Frese & Keith, 2015; van Dyck et al., 2005). Moreover, individual errors are apprehended, in a positive sense, as feedback or warning signals, contributing valuable knowledge to the organization (Keith & Frese, 2008; van Dyck et al., 2005). In this approach, errors are no longer perceived as a source of nuisance, but as a

source of learning and improvement and are therefore not sanctioned (Chillarege et al., 2003; Shepherd et al., 2011; Tucker & Edmondson, 2003). Adopting such a psychological safety net creates a climate of openness (rather than a climate of fear), especially when managers are honest and humble enough to admit their own errors openly. In other words, the work environment built up gives people a sense of trust and confidence, in which the latter are encouraged to report, discuss and correct their errors (Edmondson, 1996, 1999; Edmondson & Lei, 2014; Farson & Keyes, 2002; Gronewold et al., 2013). Managers also work on the assumption that such an organizational culture promotes experimentation, personal initiative and innovation in the long run (Edmondson, 1996, 1999; Frese & Keith, 2015; Goodman et al., 2011; Zhao & Olivera, 2006). This is why some isolated organizations even celebrate their mistakes (Shepherd et al., 2011). However, one of the main concerns of managers in an error-management culture is the risk that it could result in mediocrity, *i.e.* create a lax work environment in which individual errors proliferate and people do not work as hard as they could (Edmondson, 2011; van Dyck et al., 2005).

To sum up, there are two contrasting views of error in the OB and OP literature (blame-oriented vs. learning-oriented), depending on whether the organization takes a negative or a positive view of individual errors (Dimitrova et al., 2017). The collective representation of how an organization behaves in the case of an action error is part of the organizational culture (Van Dyck et al., 2005) which ranges – as suggested above – from “*error averse*” to “*high error management*” (Gronewold et al., 2013, p. 194). Nevertheless, as Dimitrova et al. (2017: p. 661) argue, there is a third perspective which stands between these two approaches. As they note, “*it has previously been suggested that in practice both error prevention and error management are necessary (e.g., Hofmann & Frese, 2011; Van Dyck et al., 2005) (...). In most situations, (...) people use a combination of both, in the sense that they first prefer not to make an error, but if they do, they adapt and focus on dealing with it and hopefully minimize its negative*

consequences (Hofmann & Frese, 2011).” Since this third perspective integrates – at least in a second stage – the error-management culture, it means that the representation of individual errors associated with this “mixed” approach is partially positive (*i.e.* people can deal with mistakes because they feel safe revealing them), contrary to the “*pure*” error-prevention approach in the sense of van Dyck et al. (2005, p. 1229).

1.3. Switching from pure error prevention to error management: a cultural change

In practice, the pure error-prevention approach is predominant in most organizations (van Dyck et al., 2005). Lack of error tolerance is thus the most common scenario (Guchait et al., 2016). Indeed, “*many organizations tend to punish the occurrence of errors*” (van Dyck et al., 2005, p. 1230). This is regrettable in that there is evidence that the error-management culture has a more beneficial impact than the pure error-prevention one on affective (Chillarege, Nordstrom & Williams, 2003), cognitive (Keith & Frese, 2005) and behavioural (Bell & Kozlowski, 2008) attitudes. For example, “*error management (...) influences coping by dampening negative emotion, as evidenced by less worry*” (Dimitrova et al., 2017, p. 669). Like these authors, scholars in OB and OP have mostly compared the two approaches of error-handling in terms of outcomes, highlighting the greater virtues of error management. As van Dyck et al. (2005) stated, in comparison with the pure error-prevention culture, the error-management culture (especially open error communication about mistakes) encourages learning from errors and may also stimulate organizational innovativeness. Frese & Keith (2015) thus suggest that error prevention needs to be supplemented by error management.

To our knowledge, no study has investigated whether it is possible – and if so, under what conditions – to deliberately switch from a pure error-prevention culture to an error-management culture (pure or mixed, depending on whether the organization switches to the second or third perspective described above). Only Dean Shepherd and co-authors have taken an interest in the

“reframing” of failure as an opportunity to learn through the normalization process (Shepherd, Covin, & Kuratko, 2009; Shepherd et al., 2011). While errors and failures in an organizational context need to be distinguished (Frese & Keith, 2015; van Dyck et al., 2005), the corresponding literatures are clearly related and many of the mechanisms and findings overlap (Dahlin et al., 2018).

Since the question is one of intentionally moving from a pure error-prevention to an error-management culture (*i.e.* from a negative representation of individual error to a positive one), error-reframing can logically be interpreted as a change in the organizational culture (Canato, Ravasi & Phillips, 2013; Howard-Grenville et al., 2011; Molineux, 2013). Like van Dyck et al. (2005), we thus study error handling in terms of organizational culture. Indeed, both the pure error prevention approach and the error management approach reflect a “*deep structure of organization*” (Denison, 1996, p. 624) that is fundamentally distinct. In particular, we see that beliefs, patterns of thought, values, hypotheses, behavioural norms and expectations with regard to individuals are very different from one error-handling model to another (Canato, Ravasi & Phillips, 2013; Molineux, 2013). Moving from one error-handling approach to another within an organization therefore implies a planned and directed cultural transformation (Weick & Quinn, 1999). As such, the literature on cultural change has specifically focused on intentional cultural shifts, with particular focus on the “*prime-mover*” role of company leaders (Howard-Grenville, Golden-Biddle, Irwin & Mao, 2011).

However, studies on cultural change show that achieving change in an organizational culture is extremely difficult. As a result, cultural changes are often slow, diffuse and incremental (Canato et al., 2013, Howard-Grenville et al., 2011, Molineux, 2013, Schein, 2010). On this basis, we can assume that promoting an error-management culture within an organization – and, relatedly, a positive representation of individual errors – will necessarily be partially impeded. There may therefore be limitations, constraints and, conversely, conditions for success in error reframing.

In this paper, we thus ask the following question: “*To what extent and under what conditions can an organization culturally transform – through its company leaders – the representation of individual errors?*”

2. Methodology

To answer this question, we conducted a qualitative study on the unique case of MAIF, which has formally established a right to error for its employees. This type of approach appears suitable for an in-depth study of an issue that has barely been touched on from an academic perspective to date (Yin, 2017).

2.1. Choice of field study

MAIF is a French mutual insurance company with just under 7000 employees and a turnover of 3.4 billion euros in 2016. Between 2012 and 2015, the company decided to explicitly include the “*right to error*” in several official documents (see below), such as the mobility accompanying agreement in 2012, the company agreement plan on quality of working conditions and the prevention of psychosocial risks in 2014, and the strategic plan in 2015. The aim of this new way of handling errors – described as a “*managerial revolution*” (Entreprise & Carrières, 2015, p. 23) in the press – was to reassure employees to whom the company leaders wanted to give more autonomy.

2.2. Data collection and analysis

2.2.1. Data collection

We interviewed 28 MAIF employees in one-hour semi-structured interviews, mainly between January and May 2017¹ (see Table 1). The interview guide was divided into three sections. The beginning of the interview was devoted to the establishment of error tolerance at the MAIF (*e.g.*: goals, genesis, key events, consequences, brakes). We then discussed the issue of management tools used in this new policy. Finally, since errors imply the non-achievement of goals (Dimitrova et al., 2017), we asked respondents about the link between error tolerance and organizational performance.

[Table 1 near here]

All of the interviews were fully transcribed and correspond to a first corpus of raw data of 369 pages. Our corpus also contains 224 pages of secondary data (see Table 2). The data collection ended once we reached saturation (Yin, 2017).

[Table 2 near here]

2.2.1. Data analysis

To process the different data from a ‘comprehensive research’ perspective, we used the methodology of Gioia et al. (2013).

In this approach, first-order coding faithfully reproduces the respondents’ discourse, ignoring the literature. Thus, a first reading of the collected data allowed us to generate codes, in the form of keywords, for each new idea detected. We then grouped these codes when they expressed a very similar idea. On this basis, 44 different items were created. Appendix 1 shows a representative quote for each first order category. Each time, the excerpt from the quote that

¹ Some key informants, highly involved in the error tolerance approach, were identified at the outset by the HR director. Other interviewees were then identified directly by the authors on LinkedIn and validated by the HR director. Finally, the “snowball effect” helped to identify new people to interview.

led us to classify the verbatim in this category is underlined in bold. To reinforce the internal validity of this research, we also show the total number of verbatim available for each first order category on the same line, as well as all the keywords (*i.e.* codes) associated with the item.

Second-order coding aggregates these items through two successive levels of abstraction, moving back and forth between the raw data and the literature. At this stage, “*the research process might be viewed as transitioning from ‘inductive’ to a form of ‘abductive’ research, in that data and existing theory are now considered in tandem*” (Gioia et al., 2013, p. 21). For instance, notions such as error prevention and error management come from the literature, whereas organizational commitment² is an emerging concept in this scientific field. Figure 1 shows how we progressed from 44 first-order codes to 10 second-order themes, and to 3 aggregate second-order dimensions.

[Figure 1 near here]

Once our ‘Gioia grid’ was created, we coded the primary and secondary data collected. This allowed us to construct a 150-page document with quotes (classified according to the data structure of appendix 1), from which the empirical results were then drawn. The corresponding section of our manuscript is structured according to our aggregated second-order codes, given that all the terms appearing in italics are borrowed from our respondents.

3. Empirical results

In this section, we explain how the MAIF reframed error in a bid to move from the pure “error-prevention” mindset to the “error-management” mindset. In other words, we highlight the management’s attempt to change the representation of individual error internally so as to no longer consider it as a negative event, but rather as a learning opportunity.

² Defined by Meyer & Allen (1991: 61) as the aggregation of “*three separable components reflecting (a) a desire (affective commitment), (b) a need (continuance commitment), and (c) an obligation (normative commitment).*”

3.1. Error prevention (*ex-ante*)

Before the implementation of the new Human Resources Management policy in the MAIF organization, individual error representation was very negative. Firstly, errors have a particularly negative and socially stigmatizing image in France that is highly prevalent in employees' minds. Demonstrating this "*cultural heritage*", some interviewees stressed the fact that making mistakes "*is not acceptable*" in the French education system. They used to feel "*guilty*" at school when they made mistakes, were "*judged*" on their errors and "*blamed*" by the teachers. As they would rather have been encouraged to improve and shown how to use their strengths for greater success, the interviewees denounced these practices transmitted at school which unfortunately persist in the professional context.

"On the 'right to error', I think there are still some problems in France. I don't know what the cause is (our education, our school system), but being mistaken – professionally speaking – is still seen as a blot on your copybook in France today. I think it's social, it's country-specific." (Head of a Claims Management Centre)

Furthermore, even if the MAIF has always been benevolent towards employees who make mistakes (the respondents unanimously spoke about a safe and secure professional environment), the demand for high quality at work, the idea of "*not wanting to lose*", and the need to avoid failure (e.g.: the requirement to comply with regulations, meet job targets, respect formal procedures, be supervised and controlled *a priori*, work with little delegation of authority, and meet or reduce time-to-market) were all key components of its DNA.

"MAIF was originally the mutual insurance company of French primary school teachers.³ And so we had this culture of very, very well done work in our DNA. The work submitted had to be absolutely impeccable with a box and red ribbon around it (...). And so, behind that, there's an absolute fear of mistakes. It's our culture, inherited from our history. We must hand in good work and, since we took the time to do it well, making mistakes was badly viewed (...). In our history, mistakes were seen as relatively dramatic, whereas, overall, we're quite a benevolent company. There were very few people who were fired in the teams. In the company, there were very few sanctions. There was a logic of evolution with seniority. There were very, very few negative consequences for errors. It was quite impressive: everyone was afraid of making a mistake, but there were no real penalties for them." (Director of Claims Management)

³ MAIF (Mutuelle d'Assurance des Instituteurs de France) was founded in 1934 by 156 primary school teachers. This background has forged the company's culture.

This culture of hard work reflects the employees' strong organizational commitment. Moreover, most of them felt secure when given clear objectives and when they understood the rules and processes. The interviewees' beliefs in this respect helped us to understand why errors were perceived as "*tragic*" and why they put employees in a "*vulnerable*" professional situation. Even though promotion was granted according to seniority, employees were afraid of making mistakes as they were very concerned about their "*self-image*" and their manager's judgment: they had to be beyond reproach. From this perspective, errors could not be shared or reported to their manager. This "*error phobia*" could also be explained by the specific technical background of some managers who were "*more directive*" and more focused on defining clear and quantified objectives. They lacked certain fundamental managerial skills and expertise such as emotional or situational intelligence. These "*technically directive managers*" did not tolerate errors and openly expressed their dissatisfaction, tagging colleagues who failed as ineffective workers.

"We start from quite a distance because, a few years ago, we were –some of us anyway – more inclined to do everything to hide errors, so that the N+1 didn't see and focus on them." (Human Resources Manager)

3.2. Error reframing

In 2012, MAIF introduced a new operational master plan. The aim was to reorganize the entire network of regional agencies into delegations specialized in counselling. The new model was designed to develop greater specialisation in the different entities so as to process dossiers more quickly and improve competitiveness. Concretely, regional delegations gradually abandoned their claims management activities, with more platforms specialized in key activities (face-to-face counselling and sales, distance counselling and sales, claims reporting, claims management, etc.) around large agglomerations.⁴ Ultimately, nearly 4,500 employees were

⁴ <http://www.argusdelassurance.com>

affected by this internal transformation, which often involved a career change. However, MAIF took pains to limit any anxiety linked to this operational mobility,⁵ particularly for employees moving towards jobs as counsellors or telemarketers (e.g.: involving contract negotiation, targets).

“In the Mobility Accompanying Agreement of 2 April 2012, [we incorporated] an article specifying that during their first two years, neophyte salespersons from claims management would not be subject to any procedures for professional ineptitude in the event that (even modest) quantitative targets were not met. In the time it takes for them to develop new skills and to find their feet, it's inevitable they make mistakes.” (Human Resource Director – La Tribune, 25/08/2014).

Originally, the right to error was thus implicitly linked to a certain benevolence regarding individual shortcomings in the context of these changes. The “*error tolerance*” policy was then added to the company agreement on the quality of working conditions and prevention of psychosocial risks, signed in January 2014. The appendix to the agreement states: “*We all make mistakes, it is the very nature of human beings. However, we must learn from our mistakes to improve and progress.*” The right-to-error concept was thus further developed in the new text. Indeed, it now also related to innovation challenges, recalling the “*risk inherent to all initiatives.*” In the same vein, the 2015-2018 strategic plan, called “*the audacity of trust*”, explicitly includes the “*right to error*”, encouraging experimentation at all levels of the company.

In order to change the initial mindset with regard to individual errors, MAIF’s company leaders thus decided to pursue a “*cultural transformation*”. The aim was to support local experimentation, coinciding with the evolution of practices and company culture, and to recognise the right to make mistakes. There was also a determination to decompartmentalize the decision-making process and the level of responsibility (annual sustainability report 2014, pp. 60-61). Thereafter, “*error tolerance*” was transmitted through the position and decisions

⁵ In practice, employees had two choices: either they were assured of keeping their job, but they had to be able to move; or they remained in their geographical location, but had to be ready to potentially change their job (Entreprise & Carrières, 02/11/15).

adopted by the company leaders. For instance, several seminars were organized for the managers, many messages were posted on the internal and external social networks, interviews were conducted with the media, etc. By adopting this ‘pedagogical’ approach, MAIF’s management aimed to “*bring this concept to life*” and to encourage innovation and agility. The goal was to make all those involved more responsible, reduce control, increase autonomy and acknowledge the risks linked to initiatives.

“As part of a major cultural shift, the position of the company leaders is that this topic is ‘sponsored’ by managers who occupy posts in the COMUP⁶, where error tolerance is defended. A COMUP member from my HR department told us about it during a seminar. We had a two-day meeting and this topic of the ‘right to error’ had come up. And, indeed, it has a specific impact. When we have the HR deputy director who says, in front of an audience of twenty people, that we have the right to error (in the introduction to the two-day seminar), it’s a clear signal and has a strong resonance. It’s a strong speech (...), initially transmitting a message that’s clearly set out and, on the whole, intended simply to reassure.” (Senior Human Resource Manager)

The management team’s collaboration was needed to spread this new “*official position*” – *i.e.* to no longer perceive error as something negative, but as something potentially positive. The managers were expected to position error tolerance as a high priority and explain the concept to their colleagues. True, some of them were sceptical of the “*company leaders’ official rhetoric*”, considering it an empty promise. They were not convinced that the employees would “*play along*” with the official rules. Hence an *ad hoc* cell of 10 people, called T’Cap (for Transformation, Confidence, Agility and Performance), was formed between 2014 and 2017 to make the “*cultural transformation*” operational. More specifically, managers benefitted from a personalized managerial support plan (called PAM, Plan to Accompany the Managers). This plan identified 8 managerial trust markers that formed the bases of the human resource tools. For instance, training session standards were based on these markers, the 360-degree feedback tool was developed, as was the provision of a “*dedicated guide*” who could not be a direct manager, the opportunity to benefit from the expertise of a coach, etc. In practice, “*error*

⁶ A committee reserved for managers in top executive positions.

tolerance” was included in the “*appreciate and value*” marker. Managers were explicitly asked to “*accept errors*” in order to transform them into individual and collective sources of learning. To this end, managers were trained to provide positive as well as negative feedback for their colleagues. More broadly, the PAM redefined managers’ roles so they became “*manager-coaches*” in charge of their colleagues’ professional development, helping them to improve their skills at analysing their errors.

“We built 8 markers to define the posture of a manager by trust. We encouraged all of our managers to self-position in relation to these 8 markers. Then we recommended that they do so through the mirror effect of their peers and their colleagues, and to report all that (...) so they could identify areas where they are in difficulty and build the support plan that would help them progress on these points (...). Obviously, this logic of benevolence and 'right to error' is included among the 8 markers.” (Director of Claims Management)

This new way of managing was not easy for the more ‘directive technical managers’, used to relying on formal and quantified objectives and checking that processes were respected. There was a real need to learn to delegate more, to empower colleagues and to give them more autonomy. However, it is now becoming a reality for the operational employees. As a result, the new culture is gradually spreading through the network, depending on the managers’ ability to adapt to the new policy. The company leaders do not want to generate a “*brutal feeling of disruption*”, which is why the ‘umbrella’ concept of “*audacity of trust*” is communicated more widely than that of “*error tolerance*”. The latter has not yet been adopted or assimilated by all the operational staff.

“For the moment, I have the impression that the company is disinclined to check – from an operational point of view – that the right to error has been implemented across the firm (...). I think the corporate strategy was also to let managers go at their own pace and not create too much disruption. It appears, at least, that they didn’t want to put managers in an uncomfortable situation (...). The right to error is more of a concept for the moment, which people have heard about and which is slowly penetrating minds. We know that it’s one of the managerial skills of tomorrow or, at any rate, a managerial position of the future. So, that’s where we try to go.” (Head of a Claims Management Centre)

3.3. Error management (ex-post)

When implementing the new managerial philosophy, the company leaders decided not to introduce a rigid framework to objectively define the kind of errors that could be tolerated (or not) in everyday situations. There is trust in the ability of managers to judge mistakes. In practice, managers appear to spontaneously offer common definitions of error tolerance, attempting to identify the “*real intentions*” of their colleagues when they make mistakes. For instance, if a person’s aim is to improve the organization’s efficiency but unfortunately the initiative fails, the manager will approve and encourage the innovative intention. Likewise, if an error is committed in a complex case or is due to a lack of attention (without deliberate damage), the manager will not blame the colleague in question. On the other hand, malicious or deliberate behaviour (like an illicit act or fraud) will not be tolerated because it cannot be considered as an error but is an intentional action for the benefit of a single person. A warning, a lay-off or even a dismissal could be considered in such cases.

In other words, if an individual was “*acting in good faith*” or with “*good intentions*”, it will be taken into consideration when analysing errors.

“In my opinion, the individual’s good faith and the repetition of the error should prevail. If the person wanted to do it right, but got it wrong, and made the mistake for the first time, that’s fine. Anyway, the mistake has been made, so there’s no point in beating up the person! It would be different if you felt that the person acted in bad faith. For instance, if he was told that for this type of action, it was imperative that he follow such or such a process, and we know or guess that he deliberately didn’t follow it because it took him too much time or he didn’t want to do it, in that case, the error is not excusable (...). When it’s a repeated error, at a given moment, when we’ve really provided the support needed, it means that the person is perhaps not up to scratch, and at this point, we also need to be able to tell him that. There, it becomes an error that’s no longer acceptable and special measures should be taken with that person to monitor him more closely or to give him more support, but he’ll have less autonomy.” (Head of a Claims Management Centre)

Colleagues are thus expected to learn from their mistakes and to stop repeating them. If they keep making the same errors, they will not be sanctioned, but will be subject to “*specific*

measures". For instance, they will enjoy less autonomy at work, will have to undertake special training, will be offered a different job, etc.

Although the MAIF is historically a caring company with regard to its employees, the formal establishment of the "*error-tolerance*" policy consolidated individuals' psychological security and well-being. To illustrate the caring work conditions and the change in perception regarding mistakes, interviewees readily described specific situations where they had failed and were not sanctioned or subjected to any undue pressure.

"In fact, I made a small mistake that my manager pointed out to me. I recognized it completely. I think, that day, I was a little tired. So, I didn't pay attention to some notes in the file. It generated a payout for an accident by the MAIF which shouldn't have been paid if I'd been a little more careful. It was simply pointed out to me. There was no sanction, no email, or anything else. However, I immediately recognized my responsibility in this error. So obviously I try not to do it again (...). Personally, I feel this 'right to error' growing over time. I already had a good feeling about it, because originally, I come from elsewhere. But that feeling is stronger today than it was six years ago." (Sales Counsellor)

Furthermore, survey findings from the "Great Places to Work" Institute noted a positive improvement in individuals' perception of "error tolerance" between 2015 and 2017 (see Table 3) when asked if their managers accepted unintentional mistakes at work. However, this change is still somewhat slow (the score rose 6 points in two years). In addition, only two thirds of employees perceive error tolerance, indicating that the cultural change is not yet complete.

[Table 3 near here]

Furthermore, employees pointed to a strong difference between errors due to "*unfortunate experiments*," which are systematically mentioned by company leaders,⁷ and the more frequent ones occurring in the course of their work such as erroneous financial transactions or being unable to give clients correct information.

⁷ We must remember that, at first, error tolerance was introduced to allay employees' fears when the company introduced a new operational framework and wanted to enhance "*workplace satisfaction*". The approach gradually developed, with innovation and creativity being encouraged to improve economic performance and customer satisfaction. The error-tolerance concept has thus evolved, shifting from acceptance of unmet targets due to professional ineptitude or mistakes to a more caring posture if an individual fails when trying something unusual or different (see section 3.2.).

“When company leaders say, ‘we establish a right to error’, some concrete examples should be given, telling people ‘if you make an error in a guarantee or payment, the company won’t blame you’. The right to error is often illustrated by the right to experiment. However, there are two distinct kinds of things. Our employees can certainly try out new things in their portfolios, but there are no real opportunities to suggest quirky ways of working. They are framed by the law, by conventions.” (Call Centre Manager)

Professional mistakes are still perceived by a minority of managers as a “*lack of professionalism*”. Moreover, even when the manager is caring, individuals still feel very unhappy about situations in which they fail, especially if the mistake is identified by other people such as a client, a colleague from another centre, etc. before they notice it themselves. Nevertheless, the “*error-tolerance*” policy means that employees can discuss their mistakes more openly with their managers and makes them feel safe enough to discuss new ideas for improvement with their managers. Such interactions between managers and employees offer great learning opportunities.

However, individuals are not yet ready to share all their mistakes with their colleagues in order to promote an indirect way of learning. Teams still lack the maturity to collectively discuss individuals’ errors and do not want to be judged by their peers, even though managers expect them to collaborate and to discuss mistakes. At the same time, employees are clearly opposed to the idea put forward by the company leaders of “*celebrating errors*”. The main goal is to encourage initiatives, to dedramatize setbacks, as in the United States, and to create organizational levers for progress. Most of our interviewees found this practice hard to understand. They were “*not thrilled to be part of it*” and judged it as “*unnatural*” and contrary to the organizational culture.

“I’m the first to recognize my mistakes. Recently, I omitted an important document in a procedure and I was totally willing to admit it (...). It happens to everyone. I know very well that it’s important for the company (...). I think we’re evolving: we’ve gone from a time when we didn’t say anything about mistakes to a time when we talk about them freely. Or at least, we strongly encourage people to talk about them. We’re not yet celebrating mistakes (...). It will take time. First, we need everyone to be able to speak about the mistakes they may have made (...). We’re making progress, but we still have some way to go (...). Recently, I made a mistake which had a small financial impact. It’s not millions

of euros, but a few hundred or even thousands of euros for the company. Well, I accepted it. I made the mistake and we discussed it.” (Human Resources Manager)

Given the level of discomfort with the notion of an “*error-tolerance culture without complex*”, some managers decided to set the example by acknowledging their own errors, showing that they are not infallible and helping to create a “*climate of trust*” in which the employees are also willing to admit their mistakes. This move was highly appreciated by the teams involved. However, such positioning is not unanimously approved of when it comes from the company leaders. The interviewees’ views differed: some of them interpreted the concept as a “*form of transparency and honesty*” that makes them feel “*safe*”. The company leaders appear to have a more “*human face*”, putting words into deeds. Conversely, for others, this type of discourse from their company leaders heightens their sense of grievance and leads them to worry about the company’s sustainability. According to these respondents, the level of remuneration, responsibility and hierarchical status of company leaders is not compatible with errors.

In addition to opening up dialogue, the aim of the psychological climate of trust is also to empower employees, encouraging them to be more “*audacious*” and “*creative*”. “*Error tolerance*” thus appears to be a “*corollary*” of “*duty to experiment*” in dynamic and changing contexts (e.g.: the need to meet the challenge of digitalization). In this regard, innovation is identified as an iterative process, involving tests, anomalies and failures that need to be gradually improved on. However, some employees do not feel that this experimental approach concerns them, considering that their working environment, assignments and tasks are too restricted and that they should simply comply with the rules.

“Personally, I often used the term 'right to error' in relation to a duty to experiment, a duty to try, a duty to continually improve (...). We're absolutely sure that everyone, at their own level, has the levers and discernment to improve the firm's performance. So, we're sure that everyone, in their daily life and work, is able to say: 'There, I'm not performing well; there must be a way to make this more efficient.'” (Director of Claims Management)

In this context, “*error tolerance*” at the MAIF has to fit in with the need to increase individuals’ leeway in order to promote greater “*organizational flexibility*”. For instance, in settling an insurance claim, operators are no longer restricted to a formal process, and can display creativity using “*situational intelligence*” in order to meet customer needs. In this case, they do not need to seek permission to refund a loyal and valued customer. Employees are more autonomous and freer to find the most appropriate solution without adhering to set rules.

“I link the right to error with the strategic plan, which puts the emphasis on trust (...). It allows employees to take initiative and therefore to have more room for manoeuvre or autonomy in what they can do on a daily basis (...), which was not the case before.”
(Human Resource employee – Corporate University)

In short, MAIF's new mindset is to consider error reporting and tests as learning opportunities with the aim of long-term performance improvement. Indeed, because of its mutual status, the MAIF can “*develop a long-term strategy*” (for instance, employees are encouraged to develop customer loyalty rather than to massively increase sales⁸). Thus, the company can tolerate the potential consequences of a drop in performance linked to the need to test and learn new things, to develop creative solutions and to capitalize on the knowledge gained from errors.

At MAIF, short-term performance pressure remains relatively low. Indeed, while operational performance such as the number of claims or dossiers managed, the number of phone calls received, etc. is monitored daily, no sanctions are applied if an employee is unable to meet his or her targets. Moreover, remuneration is not based on achieving individual objectives, and there is no commission. Wage rises are based more on the concept of seniority.

“The positive impact of the right to error in terms of employee wellbeing and company performance is something I’ve always believed in (...). The right to error is also a way to allow our colleagues to take risks and probably, in the medium and long term, to be more efficient because they’ll be more agile in change. Perhaps they’ll be able to test things that we wouldn’t have dared to test before, and by testing, they’ll be able to find better ways of doing things and so perform better.” (Head of a Claims Management Centre)

⁸ MAIF has won first prize in the insurance sector customer relations award called TNS Sofres–Bearing Point since 2005.

However, this type of performance management does not lead to “*permissiveness*”, a “*carelessly discarded attitude*” or “*abuses*” by the employees. In fact, the negative impact of an error-tolerant culture is curbed by the staff’s organizational commitment as they feel “*proud*” to belong to this company, and respect its “*mutualist values*”. All the interviewees said they had a “*very positive image*” of their company. They fully understand and adhere to the strategy, and really appreciate the company’s concern for its employees. This is reflected in the very low staff turnover rate.

“Ok, the right to error exists, but that doesn’t mean we do just anything and everything and that, anyway, it won’t be serious because there’s the right to error (...). Overall, at MAIF, we’re all very committed to the company. Beyond that, we don’t really want to be the champion of mistakes! What we do, we do as professionally as possible. Compared to other companies I’ve worked in, we really have a pretty strong work ethic at MAIF. So, apart from exceptional cases, we won’t fall into a culture of carelessness.” (Human resource employee – Corporate University)

4. Discussion

In this paper, we attempted to understand (1) to what extent and (2) under what conditions an organization can transform culturally – through its company leaders – the representation of individual errors. Figure 2 highlights this organizational error reframing from a pure error-prevention culture to an error-management one.

[Figure 2 near here]

In this section, we provide some answers to the two dimensions of our research question.

4.1. Extent of cultural transformation of error representation

Our paper shows that company leaders’ rhetoric about the implementation of error tolerance is not immediately performative. In other words, error reframing cannot be decreed from one day to the next, since it affects the organizational culture (Van Dyck et al., 2005), which takes a long time to evolve (Canato et al., 2013). As such, we suggest that changing a policy towards individual errors (through new processes and practices) is insufficient to change the

organizational culture, *i.e.* to achieve real change in employees' perception, reaction or handling of individual errors. This conclusion regarding the slow institutionalization of an error-management culture – despite the company leaders' visible commitment and the formalization of the approach through management tools – is in line with the analysis of Shepherd et al. (2009, p. 592) in the specific context of project failures: “*Normalization of failure (...) may be difficult to achieve. 'While companies are beginning to accept the value of failure in the abstract – at the level of the corporate policies, processes, and practices – it's an entirely different matter at the personal level. Everyone hates to fail.'* (Farson and Keyes, 2002: 4).” This confirms that findings in the respective fields of errors and failures often overlap (Dahlin et al., 2018).

In addition, our article shows that the promotion of an error-management culture within an organization may well conflict with the national culture. We thus confirm, in the specific context of error tolerance, the influence of national culture on organizational culture (van Muijen & Koopman, 1994). Our paper shows that we cannot limit ourselves to a purely organizational perimeter when studying the promotion of an error-management culture. Indeed, we note that the strong culture of blame (Zhao & Olivera, 2006) in France makes it more difficult to change individuals' representations of error tolerance. Nevertheless, the study indicates a possible shift in mentalities, but this process takes time, even in a favourable organizational context encouraged by the company leaders. Indeed, the positive vision of error, clearly expressed by the company leaders (van Dyck et al., 2005), was apparently not immediately understood by the employees. Some of them continued to perceive errors negatively, even after they were qualified as positive occurrences to be celebrated (Shepherd et al., 2011). This confirms that cognitive redefinition is a key step in cultural change (Schein, 2010). Thus, one theoretical contribution of our study is the acknowledgement that a deliberately cultivated psychological climate of trust – as defined by Edmondson (1999) – is not enough to immediately change individuals' representation of errors, which requires a certain

maturity of the teams. In other words, even when error tolerance is encouraged through a scheduled, planned and formal organizational policy (Edmondson, 1999; van Dyck et al., 2005; Weick & Quinn, 1999), mentalities – *i.e.* the reframing of error as an ordinary and learning event (Shepherd et al., 2011) – will only change when the internal managerial philosophy is strong enough to weaken the social image of errors (*i.e.* that of the country where the company belongs).

Our research also shows that the error-management culture does not necessarily please all individuals. This finding goes against the tide of how work on error-tolerance has been perceived thus far. Indeed, by contrasting an error prevention culture with an error management culture in a highly macro way, the existing OB and OP literature implicitly assumes that the error handling culture is monolithic. In particular, authors such as Dimitrova et al. (2019, p.669) systematically use the term “people” in a very general sense as, for example, when they write that “*error prevention influences people's cognition (...) and their actual behaviour*”. They therefore make no distinction between categories of individuals who may react differently to one or another mode of error handling. And yet we know that organizations are composed of subcultures (Howard-Grenville et al., 2011). In their study on error-management culture, van Dyck et al. (2005) thus focus on medium-sized or small companies because the likelihood of a homogeneous culture is higher in such organizations than in large companies. One of the interests of our study is that by investigating a large company, the subcultures on error handling became more visible. On this point, we show that representations of error are not inevitably positive when an error-management culture is promoted.

As we might imagine from the literature on error tolerance and psychological safety (Edmondson & Lei, 2014; Gronewold et al., 2013), many employees feel safer in such a working environment and are relatively enthusiastic. However, surprisingly, it also appears that other employees feel uncomfortable and have a negative reaction to the error-management

culture. In particular, managers with a “controller-manager” profile lose their bearings in such an organizational context. At the same time, given the company leaders’ strategic level of responsibility, employees feel uncomfortable with them making or admitting mistakes. Further, our study indicates that employees are more comfortable discussing their errors with their managers than with their colleagues, despite the fact that the literature often views face-saving as a mainly managerial concern (Zhao & Olivera, 2006). Thus, an error-tolerant policy appears to make employees feel safer with their managers as they realize there will be no sanctions and their career will not be in jeopardy after reporting mistakes. On the other hand, however much is done to reduce the perceived importance of errors, individuals do not want others to see their weaknesses (and even less to celebrate them). And yet, “[in] organizations that promote an error management culture (...), organizational members not only learn from their own errors, but from coworkers’ errors as well.” (Guchait et al., 2016). This clearly shows that the error-reframing process is not yet complete in our case study, theoretically reinforcing the previous conclusion that error tolerance is a long-term process rather than a decision that can be implemented with immediate effect.

To summarize, although the error-management culture is implicitly portrayed – given its virtues for the organization – as an ultimate goal of error-handling in the OB and OP literature (Dimitrova et al., 2017; Frese & Keith, 2015; van Dyck et al., 2005), our paper paradoxically suggests that the promotion of error tolerance can give employees cause for concern. It thus introduces a certain degree of nuance to the analysis through a far more micro-reading of error tolerance. Indeed, until now, the counterintuitive idea that error tolerance could be perceived by individuals in a partially negative way had not been raised in the OB and OP literature.

Finally, our research shows that the perception of error tolerance depends to a large extent on the type of error committed. We thus understand the value of categorizing individual errors, in line with authors such as Edmondson (2011) or Zhao & Olivera (2006), for example. In the

case studied, everyone understands that a voluntary error (*i.e.* a deviance or a violation) is not tolerated since it is a fault and not an error (Frese & Keith, 2015; van Dyck et al., 2005). On the other hand, the perception of error tolerance differs widely, depending on whether the individual error arises from “*exploratory testing*” in the sense of Edmondson (2011, p.50) (*i.e.* an innovative initiative that failed) or is a “*slip*” as defined by Zhao & Olivera (2006, p.1014) (*i.e.* inattention in a daily task). The former is well accepted by employees (even if not everyone feels concerned by such exploratory testing), while the latter is poorly accepted, especially as it is the most frequent type of error made in the course of a career. In practice, the view of individual errors depends on the roles played by the different actors. For example, company leaders equate errors with unsuccessful attempts at experimentation, while counsellors associate them more spontaneously with slips in everyday file processing.

4.2. Conditions for success of cultural transformation of error representation

While we have emphasized the limitations of an error tolerance policy – at least in the short-medium term – conditions for successfully promoting an error-management culture have also been highlighted.

First, it appears that the concept of error tolerance needs to be adjusted over time according to strategic priorities. Initially, the goal of the organization in question here was to conduct an organizational transformation, which implied error tolerance linked to the non-achievement of objectives following this reorganization (to create psychological safety). In a second step, the aim was to focus on innovation (*e.g.*, to deal with the challenges of digitalization), which implied error tolerance related to encouraging experimentation. We thus observed a temporal semantic shift in the error-tolerance concept. Indeed, after a certain time, the focus was not only on meeting objectives (Frese & Keith, 2015; Keith & Frese, 2005; Zhao & Olivera, 2006; Zapf & Reason, 1994), which involves tolerance of inadequate performance or professional errors,

but also on being attentive to and engaged in individuals' unsuccessful initiatives in order to promote innovation and creativity (Edmondson, 2008, 2011; Frese & Keith, 2015; Goodman et al., 2011; van Dyck et al., 2005). The cognitive redefinition (Schein, 2010) regarding individual errors is therefore conducted in two separate phases. In other words, there is a shift from the "error tolerance" concept to a "duty to experiment", impelled by an evolution in the organizational framing (Shepherd et al., 2011). The main goal of the error tolerance culture is in fact to nurture each individual's power to make autonomous decisions (Frese & Keith, 2015; Keith & Frese, 2005; Zhao & Olivera, 2006; Zapf & Reason, 1994) and to increase their empowerment (Edmondson, 2011). The idea is not to encourage employees to make mistakes (Keith & Frese, 2008) but to stimulate innovation and audacity – *i.e.* a logic of testing and learning – in such a way as to contribute to the organization's development. To summarize, our article shows that error tolerance is not limited to individuals' psychological safety (Edmondson & Lei, 2014), but is also intended to encourage employees to be a creative force.

Second, as we suggested earlier, a deliberate policy of error-reframing is not enough to get employees to embrace the change instantly, to make it part of their everyday life and to learn to work and interact accordingly. It therefore seems important to enrol managers in cultural change in a way that goes beyond simply introducing a new error-handling policy. Managers effectively need to be at the heart of such a cultural transformation. In this paper, we confirm the need for relays within an organization when implementing a new approach (Molineux, 2013) such as the introduction of an error-tolerance culture. Managers in particular play a key role. First, we show that the definition of "error tolerance" should not be too rigid but should be left to managers' discretion. Indeed, managerial judgement is a major operational component of an error-tolerance approach in which employees have more personal responsibility. As such, our paper points to the inseparable character between, on the one hand, error tolerance and, on the other, management by trust. Our paper also highlights the role of managers as sense-givers

(Gioia & Chittipedi, 1991) who need to translate – in terms that are accessible to the network’s actors – corporate communication on error tolerance.

Furthermore, our study complements other studies by scholars who highlight the importance of managers’ exemplarity and humility in order to promote an error-tolerant culture within an organization (Edmondson, 1996, 1999; Goodman et al., 2011; Gronewold et al., 2013). For instance, Farson & Keyes (2002) argued that strong relationships depend on managers’ willingness to admit to their own mistakes. Our results corroborate these findings to a large extent: the honesty and transparency displayed by managers is welcomed by their colleagues since it makes them feel safer with regard to their own mistakes. It also helps to make an error-tolerance policy real and tangible, promoting free speech. Lastly, our study reveals the importance of the evolving profile of managers. Indeed, an important challenge in error reframing involves capitalizing on individuals’ errors by getting them to share their mistakes with others through a policy designed to promote learning and improve practice. Employees can thus learn from their errors with the invaluable help of their managers who are a key success factor in a successful error-tolerance approach (Edmondson, 2008). Managers thus need to understand the significance of the shift in their professional role from that of controller-manager (Goodman et al., 2011; Gronewold et al., 2013; van Dyck et al., 2005) to coach-manager.

Finally, our study identifies attachment to organizational values as a further key factor in explaining how to succeed in the error-reframing process. This is especially true when, as noted in the OB and OP literature (Edmondson, 2008, 2011; van Dyck et al., 2005), employees’ strong affective commitment acts as a safeguard against laxity. Organizational commitment (Meyer & Allen, 1991) appears to be the counterpart to error tolerance, which is why a solid, trusting relationship between management and employees is fundamental. The relationship can be enhanced by giving colleagues more autonomy, a finding that converges with other studies which highlight the opposition between control and learning approaches (van Dyck et al., 2005).

Thus, low staff turnover is linked to the level of staff commitment, which in turn depends on the organization's specific past. The success of an error-tolerance policy is therefore directly linked to an organization's culture and values. These findings echo the research agenda proposed by Shepherd et al. (2011). Indeed, these authors specifically suggested strengthening the link between error normalization within an organization and the affective commitment of employees. Our study offers us an interesting perspective on this issue. Indeed, it appears here that organizational commitment is an important condition for a successful cultural change in error handling.

Conclusion

This study qualitatively investigated an intentional cultural shift designed to establish a right to error in a French mutual insurance company (Edmondson, 1999; van Dyck et al., 2005). More specifically, our main focus was to understand to what extent and under what conditions an organization can culturally transform the representation of individual errors through its company leaders.

Concerning the extent of promoting an error management culture, we portray a realistic image of its implementation, identifying some of the limitations and constraints (*e.g.*: lack of performativity, partial disconnect between policy change and cultural change, obstacle of a national culture of blame, heterogenous reactions of actors, link between error tolerance and type of error). Then, concerning the conditions for a successful error reframing, we highlight the importance of ultimately seeing experimentation as a corollary of error tolerance, and of having coach-managers as well as committed employees. We believe that our different theoretical results are directly exploitable in management terms as the findings are clearly action-oriented. We can evoke, for example, the importance of: not ignoring the "slips" in

promoting an error-management culture, associating error tolerance with management by trust or segmenting the HR population according to the reactions of employees to this type of policy. Nevertheless, we need to bear in mind several limitations of this study. Firstly, MAIF operates in France, a country where errors and failures are highly stigmatized (Ipsos, 2013) in comparison to other national cultures. Secondly, we study error reframing – by comparing two distinct periods (before and after the change in error policy) – retrospectively, while a longitudinal study would certainly have given more reliable results (Van de Ven, 1992). An interesting avenue of research would thus be to identify a company that is about to introduce a right-to-error policy and to track it over time by way of several data collection periods.

References

- Bell, B., & Kozlowski, S. (2008). Active Learning: Effects of Core Training Design Elements on Self-Regulatory Processes, Learning, and Adaptability, *Journal of Applied Psychology*, 93(2), 296-316.
- Canato, A., Ravasi D., & Phillips N. (2013). Coerced Practice Implementation in Cases of Low Cultural Fit: Cultural Change and Practice Adaptation during the Implementation of Six Sigma at 3M, *Academy of Management Journal*, 56(6), 1724-1753.
- Chillarege, K., Nordstrom, C., & Williams, K. (2003). Learning from Our Mistakes: Error Management Training for Mature Learners, *Journal of Business and Psychology*, 17(3), 369-385.
- Dahlin, K., Chuang, Y.-T., & Roulet, T. (2018). Opportunity, Motivation, and Ability to Learn from Failures and Errors: Review, Synthesis, and Ways to Move Forward, *Academy of Management Annals*, 12(1), 252-277.
- Denison, D. (1996). What is the Difference Between Organizational Culture and Organizational Climate? A Native's Point of View on a Decade of Paradigm Wars, *Academy of Management Review*, 21(3), 619-654.
- Dimitrova, N., van Hooft, E., van Dyck C., & Groenewegen, P. (2017). Behind the wheel: What drives the effects of error handling?, *The Journal of Social Psychology*, 157(6), 658-672.
- Edmondson, A. (2011). Strategies for Learning from Failure, *Harvard Business Review*, 89(4), 48-55.
- Edmondson, A. (2008). The Competitive Imperative of Learning, *Harvard Business Review*, 86(7/8), 60-67.
- Edmondson, A. (2004). Psychological Safety, Trust, and Learning in Organizations: A Group-Level Lens. In R. Kramer & K. Cook (Eds.), *Trust and Distrust in Organizations: Dilemmas and Approaches* (pp. 239-272), New York: Russell Sage Foundation.

Edmondson, A. (1999). Psychological Safety and Learning Behavior in Work Teams, *Administrative Science Quarterly*, 44(2), 350-383.

Edmondson, A. (1996). Learning from mistakes is easier said than done: Group and organizational influences on the detection and correction of human error, *Journal of Applied Behavioral Science*, 32(1), 5-28.

Edmondson, A., & Lei, Z. (2014). Psychological Safety: The History, Renaissance, and Future of an Interpersonal Construct, *Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 23-43.

Farson, R., & Keyes, R. (2002). The Failure-Tolerant Leader. *Harvard Business Review*, 80(8), 64-71.

Frese, M., & Keith, N. (2015). Action Errors, Error Management and Learning in Organizations, *Annual Review of Psychology*, 66(1), 661-687.

Gioia D., & Chittipeddi, K. (1991). Sensemaking and Sensegiving in Strategic Change Initiation, *Strategic Management Journal*, 12(6), 433-448.

Gioia, D., Corley, K., & Hamilton, A. (2013). Seeking Qualitative Rigor in Inductive Research: Notes on the Gioia Methodology, *Organizational Research Methods*, 16(1), 15-31.

Gold, A., Gronewold, U., & Salterio, S. (2014). Error Management in Audit Firms: Error Climate, Type, and Originator, *The Account Review*, 89(1), 303-330.

Goodman, P., Ramanujam, R., Carroll, J., Edmondson, A., Hofmann, D., & Sutcliffe, K. (2011). Organizational errors: Directions for future research, *Research in Organizational Behavior*, 31, 151-176.

Gronewold, U., Gold, A., & Salterio, S. (2013). Reporting Self-Made Errors: The Impact of Organizational Error-Management Climate and Error Type, *Journal of Business Ethics*, 117(1), 189-208.

- Guchait, P., Paşamehmetoğlu, A., & Madera, J. (2016). Error Management Culture: Impact on Cohesion, Stress, and Turnover Intentions, *The Service Industries Journal*, 36(3-4), 124-141.
- Hofmann, D. & Frese, M. (2011). *Errors in organizations*, New York: Routledge.
- Howard-Grenville, J., Golden-Biddle, K., Irwin, J., & Mao, J. (2011). Liminality as Cultural Process for Cultural Change, *Organization Science*, 22(2), 522-539.
- Ipsos, 2013, "Comment rebondir après un échec professionnel ?" (How to recover after a professional failure), December, 1-11. <https://www.ipsos.com/fr-fr/comment-rebondir-apres-un-echec-professionnel>
- Keith, N., & Frese, M. (2008). Effectiveness of Error Management Training: A Meta-Analysis, *Journal of Applied Psychology*, 93(1), 59-69.
- Keith, N., & Frese, M. (2005). Self-Regulation in Error Management Training: Emotion Control and Metacognition as Mediators of Performance Effects, *Journal of Applied Psychology*, 90(4), 677-691.
- Meyer, J., & Allen, N. (1991). A three-component conceptualization of organizational commitment, *Human Resource Management Review*, 1(1), 61-89.
- Molineux J. (2013). Enabling Organizational Cultural Change Using Systemic Strategic Human Resource Management – a Longitudinal Case Study, *The International Journal of Human Resource Management*, 24(8), 1588-1612.
- Nordstrom, C., Wendland, D., & Williams, K. (1998). To Err is Human: An Examination of the Effectiveness of Error Management Training, *Journal of Business and Psychology*, 12(3), 269-282.
- Rami, R., & Gould, C. (2015). From a “Culture of Blame” to an Encouraged “Learning from Failure Culture”, *Proceedings of Cross-Cultural Business Conference*, May 21st-22nd, 243-250.

Reason, J., Parker, D., & Lawton, R. (1998). Organizational Controls and Safety: The Varieties of Rule-Related Behaviour, *Journal of Occupational and Organizational Psychology*, 71(4), 289-304.

Schein, E. (2010). *Organizational culture and leadership* (4th Ed.), San Francisco: Jossey-Bass.

Shepherd, D., Covin, J., & Kuratko, D. (2009). Project failure from corporate entrepreneurship: managing the grief process, *Journal of Business Venturing*, 24(6), 588-600.

Shepherd, D., Patzelt, H., & Wolfe, M. (2011). Moving Forward from Project Failure: Negative Emotions, Affective Commitment, and Learning from the Experience, *Academy of Management Journal*, 54(6), 1129-1259.

Tucker, A., & Edmondson, A. (2003). Why Hospitals Don't Learn from Failures: Organizational and Psychological Dynamics that Inhibit System Change, *California Management Review*, 45(2), 55-72.

Uribe, C., Schweikhart, S., Pathak, D., Dow, M., & Marsh, G. (2002). Perceived Barriers to Medical-Error Reporting: An Exploratory Investigation, *Journal of Healthcare Management*, 47(4), 263-279.

van Dyck, C., Frese, M., Baer, M., & Sonnentag, S. (2005). Organizational Error Management Culture and Its Impact on Performance: A Two-Study Replication, *Journal of Applied Psychology*, 90(6), 1228-1240.

van Muijen, J., & Koopman, P. (1994). The influence of national culture on organizational culture: A comparative study between 10 countries, *European Journal of Work and Organizational Psychology*, 4(4), 367-380.

Weick, K., & Quinn, R. (1999). Organizational Change and Development, *Annual Review of Psychology*, 50(1), 361-386.

Yin, R. (2017). *Case Study Research and Applications: Design and Methods* (6th Ed.), Los Angeles: Sage.

Zapf, D., & Reason, J. (1994). Human errors and error handling, *Applied Psychology: An International Review*, 43(4), 427-432.

Zhao, B., & Olivera, F. (2006). Error Reporting in Organizations, *Academy of Management Review*, 31(4), 1012-1030.