

Learning in hospitals during the COVID-19 pandemic – an improvisation perspective on organizational resilience

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Introduction

For hospitals, the ongoing COVID-19 pandemic is an extreme context (Hällgren et al., 2018) which bears the potential to advance management and organization science (e.g. Faraj & Xiao, 2006). In the proposed paper, we report a real-time study on two Swiss hospitals. Like other countries, Switzerland is currently facing a second wave of the pandemic after having returned to normal activities as the first wave receded during 2020. During this time, and despite expecting the second wave, the studied hospitals appeared to have done little to learn from and prepare for the current second wave.

In order to explore this observation, we use organizational resilience that describes the capacities and processes of organizations to cope with a crisis and maintain functioning (Duchek, 2020; Sutcliffe & Vogus, 2003; Weick & Sutcliffe, 2007; Williams et al., 2017). The literature argues the importance of learning from previous adversities to build resilience (Haunschild et al., 2015, p. 1697; Madsen, 2009, p. 872; Weick et al., 1999, pp. 34 & 39; Williams et al., 2017, p. 749). At the same time, studies highlight various difficulties (Barton & Sutcliffe, 2009, p. 1350; Baumard & Starbuck, 2005, p. 295; Cannon & Edmondson, 2001, pp. 165–166, 2005, pp. 301–303; Edmondson, 2004, p. ii9). Despite these insights, scholars still call for a better understanding of learning to advance organizational resilience (Barton & Sutcliffe, 2009; Baumard & Starbuck, 2005; Cannon & Edmondson, 2001, 2005; Duchek, 2020; Edmondson, 2004). One open issue is the limited insights into how organizations learn while coping with an adversity, and how this learning during the adversity impacts on learning from the adversity afterwards. This niche motivates our research question: *How do organizations learn during an adversity and how does that impact learning from adversities?*

Our ongoing real-time study of two Swiss hospitals coping with COVID-19 enables us to address this question empirically. Conceptually, we use the concept of improvisation to better understand learning during the pandemic and its impact of learning after this adversity.

Our aim is to complement the predominant planning perspective of organizational resilience (Darkow, 2019; Duchek, 2020; Williams et al., 2017) with the improvisational one as Weick and Sutcliffe (2007, p. 14) originally proposed. Improvisation is broadly defined as planning while acting (Clegg et al., 2002, p. 491). It is a “mixture of the pre-composed and the spontaneous” (Weick, 1998, p. 551). We believe that improvisation helps to advance the dynamic and complex nature of organizational resilience as it unfolds in situ (Barton & Sutcliffe, 2009, p.

1329; Kahn et al., 2018, p. 511; Linnenluecke, 2017, p. 25), and allows adding to existing explanations on the difficulties of learning from adversities.

In the next section, we elaborate on organizational resilience and argue for the improvisation perspective. The method section briefly sketches our research approach, followed by insights into the emerging findings. The discussion points to the proposed contributions, before concluding this short paper.

Background section: Organizational resilience and improvisation

Learning from adversities is a crucial element of developing organizational resilience (Haunschild et al., 2015, p. 1697; Madsen, 2009, p. 872; Weick et al., 1999, pp. 34 & 39; Williams et al., 2017, p. 749) and two theoretical conceptualizations of organisational resilience have emerged: The conceptualization by Duchek (2020, p. 225) has proposed three stages of resilience composed of anticipation, coping and adaptation. During the adaptation stage, learning from the experienced adversity is crucial to develop organizational resilience (p. 231). According to this concept, organizations should reflect and learn from the experienced crisis and incorporate insights for advancements (p. 231). A second conceptualization highlights that feedback loops are central part for learning and for developing organizational resilience (Williams et al., 2017, p. 249). Feedback loops enhance resilience through “insights and perspectives that feed into resource endowments, ongoing organizing, adaptation, preparation, and response to adversity” (p. 249).

These two concepts regard learning for organisational resilience as a process stage after an adversity occurred. Duchek (2020, pp. 225 & 231) suggests learning as a stage after coping with the adversity. In a similar way, Williams et. al. (2017, p. 249) argues for feedback loops where organizations learn for future adversities. Thereby, the two concept correspond with a planning perspective (e.g. Darkow, 2019). Planning is a sequential process where “actors first analyse, then decide on what to do, and then implement that choice” (Cunha et al., 2016, p. 560).

However, the planning perspective illuminates less on how learning occurs during an adversity. This setting is characteristic for the COVID-19 pandemic. It caught hospitals unprepared and led them to learn as the crisis unfolded over time, and was not an event like an earthquake

(Ciuchta et al., 2021; Williams et al., 2017). An improvisational perspective adheres to this empirical phenomenon (Cunha et al., 2016; Weick, 1998; Weick & Sutcliffe, 2007). This perspective also allows to focus on how resilience unfolds (Barton & Sutcliffe, 2009, p. 1329; Kahn et al., 2018, p. 511; Linnenluecke, 2017, p. 25); how it works (Duchek, 2020, p. 238); and the role of time during an unfolding adversity (Williams et al., 2017, p. 753).

Methods: ongoing real-time process study

In order to further explore learning during an adversity with an improvisational perspective, we are conducting a rare real-time case study (Yin, 2018). We adopt a process perspective to follow the events and activities over time (Langley et al., 2013). The field phase started with the first wave in March 2020 and is ongoing, situated in two Swiss public hospitals (Hospital A, Hospital B). Therein, our unit-of-analysis are the hospital task-forces that are the central decision-making bodies to address the COVID-19 pandemic. It provides an extreme context, defined “as an environment where one or more extreme events are occurring or are likely to occur that may exceed the organization's capacity to prevent and result in an extensive and intolerable magnitude of physical, psychological, or material consequences to—or in close physical or psychosocial proximity to—organization members” (Hannah et al., 2009, p. 898).

The data gathered so far consists of the following: In Hospital A, we observed 34 taskforce meetings, 120 documents and protocols thereof, 55 repeated interviews with a physician and a nurse; and 26 retrospective interviews with the taskforce members after the first pandemic wave. In Hospital B, we received 53 documents and protocols of their taskforce and 31 retrospective interviews with their taskforce members. Due to cantonal restrictions, we were not allowed on site at Hospital B, which is why it serves as a validating comparison to our main case, which is Hospital A. In addition, we gathered approximately 80 documents of external data of cantonal and federal authorities, because their regulations impact on the organization's actions.

In the ongoing data analysis we aim to theorize from process data (Cloutier & Langley, 2020; Langley, 1999). First, we develop a detailed case description for each hospital and use visual mapping to capture the unfolding events, decisions, and activities of the hospitals to cope with the pandemic, complemented by the developing regional and federal regulations. Second, we follow the search for episodes of improvisation, using the concept of episodes introduced by

Hendry and Seidl (2003). This methodological approach allows carving out events of improvisation in terms of their beginning, conduct and ending. Third, we analyse the resulting set of improvisation episodes in order to identify the main themes that required responses to the pandemic; and the patterns of how organizational members developed these responses and thereby learned during the pandemic. Fourth, the analysis focuses on the retrospective interviews conducted during summer 2020, when both hospitals had resumed their previously normal operations. This analysis allows validating the themes and patterns of learning during the pandemic. More importantly, the analysis reveals the lack of learning after the end of the first wave, and illuminates the explanations as provided by the organizational members.

Preliminary findings

Our study provides a rare example of a real-time study on organizational resilience. The emerging findings show how organizational members generate responses to cope with the unfolding crisis by means of improvisation: First, we observed that each hospital developed their responses as a reaction to the unfolding events, rather than relying on pre-planned solutions. For example, each hospital decided early on against using a prepared crisis response concept. Instead, they formed their taskforce consisting of medical specialists who were close to the central processes and units of patient treatment, testing, epidemiology, and logistics.

Second, we observed that improvisation implies that learning takes place while coping with an adversity. For example, central guidelines like the use of face masks changed subsequently, as a response of new regulations and emerging but ambiguous clinical studies. These changes occurred recurrently while organizational members enacted them. This face mask guideline and other examples underscore such learning for while enacting the responses, indicating a circular pattern of improvising to cope with the unfolding adversity.

Third, we observed patterns of interaction. One pattern was making sense of the situation, when organizational members acknowledged the uncertainty of the unfolding pandemic. The other pattern were directives given to other parts of the organization in order to ensure the implementation of a response. As these recipients also engaged in their own sensemaking with sometimes different conclusions, there was a permanent dynamic which appears characteristic for improvisation. During an adversity, planning for a particular response requires coping with uncertainty, while responses then require simplicity, and consistency.

Fourth, the retrospective interviews confirm that both hospitals did not engage in significant efforts to learn from the first wave in order to prepare for the second one. Respondents explanations included statements indicating that they had learned during the first wave, and a second wave would just mean to return to the developed responses. Another explanation was the questioning of learning after the pandemic because the respondents considered the hospitals coping during the first wave as successful. These data are surprising also because our field access was granted particularly because the task forces initially wanted to use the insights for learning.

Discussion

The emerging empirical insights are preliminary but suggest two contributions to the literature of organizational resilience and extreme context research. First, improvisation complements existing explanations for the challenges to learn from adversities during the adaptation stage. This explanation is endogenous to improvisation. Improvisation can inhibit learning after the adversity if the organizational members perceive their improvisation had been successful. In combination with known exogenous factors, like production pressure (Edmondson, 2004), political power games and personal interests (Barton & Sutcliffe, 2009) we also observed empirically, successful improvisation might prevent organizations to learn from an adversity. In the hospitals studied, this was even the case despite that organizational members expected the second wave in Fall.

Second, we observed that improvisation shifts the time of learning. With improvisation learning occurs during the adversity. Thereby, improvisation expands the scope of learning to develop organizational resilience from the adaption to the coping stage (see Duchek, 2020). This expansion implies that feedback loops (Williams et al., 2017) can enhance the development of organizational resilience not only after but also during an adversity. However, this contribution is subject to the condition, that the adversity stretches across time, like the Covid-19 pandemic. An adversity as an event, like an earthquake, inhibits learning during the adversity. Actors might lack the time actors to make sense of the situation. In addition, time is also required in organizational setting to enact a response because several actors are involved in different locations.

Concluding remark

Triggered by an empirical observation, we set out to better understand how organizations learn from adversities in order to further develop organizational resilience. Our analysis shows that improvisation highlights learning during an adversity but hinders it after the adversity. For the further development of organizational resilience this insight implies to combine the sequential notion of the planning perspective on organizational resilience (e.g. Darkow, 2019; Duchek, 2020) with the circular and iterative one of improvisation (Weick, 1998, p. 551; Weick & Sutcliffe, 2007, p. 31; Wildavsky, 1988, p. 238). In light of today's increasingly complex and dynamic world, both are needed to prepare and mindfully address extreme contexts, like that of the COVID-19 pandemic.

References

- Barton, M. A., & Sutcliffe, K. M. (2009). Overcoming dysfunctional momentum: Organizational safety as a social achievement. *Human Relations*, 62(9), 1327–1356.
- Baumard, P., & Starbuck, W. H. (2005). Learning from failures: Why it May Not Happen. *Long Range Planning*, 38(3), 281–298.
- Cannon, M. D., & Edmondson, A. C. (2001). Confronting failure: Antecedents and consequences of shared beliefs about failure in organizational work groups. *Journal of Organizational Behavior*, 22(2), 161–177.
- Cannon, M. D., & Edmondson, A. C. (2005). Failing to Learn and Learning to Fail (Intelligently). *Long Range Planning*, 38(3), 299–319.
- Ciuchta, M. P., O'Toole, J., & Miner, A. S. (2021). The Organizational Improvisation Landscape: Taking Stock and Looking Forward. *Journal of Management*, 47(1), 288–316.
- Clegg, S. R., da Cunha, J. V., & e Cunha, M. P. (2002). Management Paradoxes: A Relational View. *Human Relations*, 55(5), 483–503.
- Cloutier, C., & Langley, A. (2020). What Makes a Process Theoretical Contribution? *Organization Theory*, 1(1), 263178772090247.
- Cunha, M. P., Miner, A. S., & Antonacopoulou, E. (2016). Improvisation Processes in Organizations. In A. Langley & H. Tsoukas, *The SAGE Handbook of Process Organization Studies* (pp. 559–571). SAGE Publications Ltd.
- Darkow, P. M. (2019). Beyond “bouncing back”: Towards an integral, capability-based understanding of organizational resilience. *Journal of Contingencies and Crisis Management*, 27(2), 145–156.

- Duchek, S. (2020). Organizational resilience: A capability-based conceptualization. *Business Research, 13*, 215–246.
- Edmondson, A. C. (2004). Learning from failure in health care: Frequent opportunities, pervasive barriers. *Quality and Safety in Health Care, 13*(suppl_2), ii3–ii9.
- Faraj, S., & Xiao, Y. (2006). Coordination in Fast-Response Organizations. *Management Science, 52*(8), 1155–1169.
- Hällgren, M., Rouleau, L., & de Rond, M. (2018). A Matter of Life or Death: How Extreme Context Research Matters for Management and Organization Studies. *Academy of Management Annals, 12*(1), 111–153.
- Hannah, S. T., Uhl-Bien, M., Avolio, B. J., & Cavarretta, F. L. (2009). A framework for examining leadership in extreme contexts. *The Leadership Quarterly, 20*(6), 897–919.
- Haunschild, P. R., Polidoro, F., & Chandler, D. (2015). Organizational Oscillation Between Learning and Forgetting: The Dual Role of Serious Errors. *Organization Science, 26*(6), 1682–1701.
- Hendry, J., & Seidl, D. (2003). The Structure and Significance of Strategic Episodes: Social Systems Theory and the Routine Practices of Strategic Change: Social Systems Theory. *Journal of Management Studies, 40*(1), 175–196.
- Kahn, W. A., Barton, M. A., Fisher, C. M., Heaphy, E. D., Reid, E. M., & Rouse, E. D. (2018). The Geography of Strain: Organizational Resilience As a Function of Intergroup Relations. *Academy of Management Review, 43*(3), 509–529. <https://doi.org/10.5465/amr.2016.0004>
- Langley, Ann. (1999). Strategies for Theorizing from Process Data. *Academy of Management Review, 24*(4), 691–710.
- Langley, Ann, Smallman, C., Tsoukas, H., & Van de Ven, A. H. (2013). Process Studies of Change in Organization and Management: Unveiling Temporality, Activity, and Flow. *Academy of Management Journal, 56*(1), 1–13.
- Linnenluecke, M. (2017). Resilience in Business and Management Research: A Review of Influential Publications and a Research Agenda. *International Journal of Management Reviews, 19*(1), 4–30.
- Madsen, P. M. (2009). These Lives Will Not Be Lost in Vain: Organizational Learning from Disaster in U.S. Coal Mining. *Organization Science, 20*(5), 861–875.
- Sutcliffe, K. M., & Vogus, T. J. (2003). Organizing for Resilience. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive Organizational Scholarship: Foundations of a New Discipline* (pp. 94–110). Berrett-Koehler.
- Weick, K. E. (1998). Improvisation as a Mindset for Organizational Analysis. *Organization*

- Science*, 9(5), 543–555.
- Weick, K. E., & Sutcliffe, K. M. (2007). *Managing the unexpected: Resilient performance in an age of uncertainty* (2nd ed). Jossey-Bass.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (1999). Organizing for high reliability: Processes of collective mindfulness. In R. S. Sutton & B. M. Staw (Eds.), *Research in Organizational Behavior* (Vol. 1, pp. 81–123). Jai Press.
- Wildavsky, A. B. (1988). *Searching for safety*. Transaction Books.
- Williams, T. A., Gruber, D. A., Sutcliffe, K. M., Shepherd, D. A., & Zhao, E. Y. (2017). Organizational Response to Adversity: Fusing Crisis Management and Resilience Research Streams. *Academy of Management Annals*, 11(2), 733–769.
- Yin, R. K. (2018). *Case study research and applications: Design and methods* (Sixth edition). SAGE.