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## Chapter 9

### **Developing Change Competencies: An Examination of Sensemaking Processes in a Change Management Competency Intervention**

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*In*

**The Psychology of Organizational Change: New Insights on the Antecedents and Consequences of Individuals' Responses to Change**

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The important role of management in change processes has been well established (Andersen, 2018; Higgs & Rowland, 2011; Lundmark et al., 2017). Evidence in the scientific literature on organizational change has shown that if change processes are managed poorly, they present a risk to both productivity and employee wellbeing (Armenakis & Bedeian, 1999; de Jong et al., 2016; Todnem By, 2005). Key elements in any organizational change process are the competencies of the managers responsible for implementing the change.

In addition to being change agents, line, middle, and senior managers must also manage daily business operations (Kieselbach et al., 2009). This dual role places managers at all levels under pressure to implement change processes efficiently. Accordingly, Bickerich et al. (2018) found that managers experienced a need for support to achieve change success and manage their own reactions to change.

The key role of managers in implementing change requires them to use tools, techniques, and approaches for implementing change. However, managers need to acquire the competencies required to apply these tools, techniques, and methods. Change management competencies have been defined in various ways in the literature (Battilana et al., 2010; Have et al., 2015; Higgs & Rowland, 2000). Change management competencies comprise behavioral repertoires and ways of thinking that foster successful change management, including managers' readiness for change (Krummaker & Vogel, 2013), understanding of change (Have et al., 2015), change communication (Battilana et al., 2010), mobilization of subordinates (Higgs & Rowland, 2000), and handling resistance (Higgs & Rowland, 2000). Have et al. (2015) underscored the complexity of change competencies by emphasizing the interrelatedness of sub-competencies and their context dependence. According to a functional definition, change competencies are change-related attitudes and behaviors "underpinning successful performance; what it is people do in order to meet their objectives; how they go about achieving the required outcomes; what enables their competent performance" (Kurz & Bartram, 2002, p. 235).

Change management training is commonly conducted to foster change competencies. We therefore need to understand how change management training affects managers' competencies and how they make sense of change.

In this chapter, we focus on a specific change management training initiative, the Change Management Competency Intervention (CMCI), in which a series of workshops using serious game simulations are conducted to develop managers' change competencies. To analyze how line, middle, and senior managers find new ways to make sense of change after participating in the CMCI, we apply a sensemaking-based analysis to qualitative case examples.

The results of the analysis shed light on the sensemaking processes that underpin how change management training enables the development of change competencies and new ways for participating managers to make sense of change management. The findings show that the CMCI led to sensemaking processes in which managers used the CMCI workshops and their experiential elements, particularly serious game simulations, as occasions to make sense of change management and their change competencies in novel ways.

First, the managers became aware of and preoccupied with key notions relating to change management in serious gameplaying, such as differing change-related needs among change recipients. Second, self-reflection, fueled by participation in the CMCI, led to the managers' reconsideration of how change was currently managed, and how it could be done differently. Third, sensemaking, and learning in the CMCI appeared to be not only incorporated into change management competencies but also combined with learning about other training techniques. These three findings demonstrate that the content of the serious game simulations and personal reflections on change and other initiatives were combined to form a new foundation for change. The findings also show that elements in the CMCI became incorporated in managers' sensemaking of change processes. The analysis provided in this chapter shows that preexisting managerial sensemaking was challenged by the managers' participation in the CMCI activities, and new ways of making sense of change, personal change, and employee change reactions emerged from the intervention.

### **Change Management Training**

In the literature, there has been substantial debate about the effectiveness of management training programs in general. For example, the extent to which learning in formal management training leads to improved management practice has been explored (Tafvelin et al., 2021), and the

overall applicability of abstract classroom training to real-world management situations has been questioned (Vignoli et al., 2021). Despite such criticism, management training in general and change management training in particular have remained popular. Moreover, previous studies have found that training initiatives can support organizational change processes (Nielsen et al., 2010). Change management training has been found to be effective in providing competencies that are lacking, as well as innovative support and development (Sartori et al., 2018).

### **Sensemaking as a Theoretical Framework for Analyzing Learning in the Change Management Competency Intervention**

To provide a theoretical framework for analyzing the development of change competencies in the CMCI, we drew on sensemaking theory (Weick, 1995; Weick et al., 2005). Sensemaking has been defined as “creating intersubjective meaning through cycles of interpretation and action, and thereby enacting a more ordered environment from which further cues can be drawn” (Maitlis & Christianson, 2014, p. 67).

Sensemaking occurs in all forms of training. It is tied to cognitive social and cultural processes, and it guides the actions of individuals and groups (Iveroth & Hallencreutz, 2015; Jordan et al., 2009; Weick, 2010; Weick et al., 2008). The concept of sensemaking has been applied to analyses of change processes to investigate managers', change agents', employees' sensemaking during change processes (Abildgaard & Nielsen, 2018; Ala-Laurinaho et al., 2017; Balogun & Johnson, 2005; Lüscher & Lewis, 2008; Teulier & Rouleau, 2013). Similarly, the process through which managers influence their subordinates has been theorized as a process of collective sensemaking (Ala-Laurinaho et al., 2017; Olsen et al., 2020). Although the CMCI is not based on sensemaking theory, it provides a useful framework for conducting detailed analyses of the ongoing reshaping of meaning during the CMCI. The relevance of sensemaking as a framework for theorizing the processes through which the CMCI affects the participating managers is fourfold. First, the sensemaking framework emphasizes the ongoing interactions between perception and enactment. Though it is not necessarily labeled as a “learning” framework (Schwandt, 2005), processes theorized as sensemaking function as linchpins between perceptions and behaviors (Corley & Gioia, 2003; Wilson & Beard, 2013). The sensemaking

framework suggests that perceptions of a current situation affect what the actors perceive to be sensible actions. Because change management is a discipline that requires managing complex change processes as they take place, a shift in focus from basic learning (i.e., learning the change management model) to the goal of sensemaking (i.e., learning to make sense of change processes) may be more relevant (Weick, 2007). The form of learning addressed in this chapter concerns continuous sensemaking processes both during and after training (Guetter & Vandenberg, 2016).

Second, although sensemaking is an ongoing process in the present context (Weick, 1995), it is also a retrospective process in which previous experiences, collective cultural norms, and cognitive schemata affect how a person makes sense of their current situation. Similarly, sensemaking is also prospective and directed toward a future situation.

Regarding dialogue and interaction with cases and simulations during change management training, the temporal emphasis on the sensemaking framework is highly relevant. Change management training offers learners an opportunity to reflect on previous events and enables them to develop new sensemaking strategies and forms of action (Olsen et al., 2020).

Third, sensemaking emphasizes the importance of identity and self-perception. The structures inherent in a specific profession or hierarchical position can affect perceptions (Olsen et al., 2020; Weick, 1993; Weick et al., 2005). Self-identification as a particular form of manager or having a distinct approach to change management is both influenced by and influences sensemaking and learning in management training (Corley & Gioia, 2003).

Fourth, an additional aspect of sensemaking is that it is shared. The implementation of change often requires collective action, which requires collective sensemaking. Collective sensemaking emphasizes on the complexity involved in developing shared beliefs, as well as the reasons that it is necessary (Weick et al., 2005) vis-à-vis the three points previously mentioned. Change management training potentially provides a space for experiencing shared sensemaking and fostering the subsequent potential for action and organizational learning (Corley & Gioia, 2003).

## **Experiential Learning Elements**

In addition to a curriculum that includes change management theories, models, and phases, most, if not all, change management training programs rely on experiential learning to influence participants (Kolb & Kolb, 2005). Experiential learning includes exercises that are aimed at letting the participant experience and enact learning. They include a broad range of techniques, such as roleplaying, reflective dialogue, case studies, and simulations (Wilson & Beard, 2013). Experiential learning can be broadly defined as “the sensemaking process of active engagement between the inner world of the person and the outer world of the environment” (Wilson & Beard, 2013, p. 26).

Experiential learning elements of change management training involve exposing participants to actual or fictional change processes and change dilemmas and encouraging them to discuss and reflect on such material (Kolb & Kolb, 2005; Moon, 2013). The goal is to influence the sensemaking processes of managers who participate in the training in relation to themselves and how they conduct change management. We argue that experiential elements in change management training are an integral component of such programs, and they play a key role in affecting the participating managers and their sensemaking processes. In contrast to classroom training and lectures, experiential components do not necessarily involve questions about how to act in specific situations and change phases. Instead, they are focused on managers experiencing and enacting elements of change processes. These experiential components support the development of change competencies, such as attitudes and behaviors in relation to change processes. Hence, they comprise a key element in raising managers’ awareness of how change management could be done differently, thus leading to new perceptions of sensemaking.

### **Serious Game Simulations**

The CMCI employs a particular type of experiential element, namely, the serious game simulation. Serious games “have an explicit and carefully thought-out educational purpose and are not intended to be played primarily for amusement” (Abt, 1987, p. 9). In the context of this chapter, “serious” refers to the game’s intention to improve managers’ change competencies. Simulations of reality have been used extensively in both military and business contexts to develop the competences of managers and leaders (Faria et al., 2009). Present-day simulations borrow elements, such as game-mechanics and narrative aspects, from roleplaying games, board games, and computer games to

present complex, rich, and realistic learning environments to participants in training programs (Agger & Møller, 2018).

As experiential learning tools, simulations are constructed to provide a safe context for experimenting with course content and exposure to alternative ways of making sense of change processes. This implies that although serious game simulations are fictitious, they encourage self-reflection and new ways of making sense of change management. In the present chapter, we argue that experiential components, specifically serious game simulations, are key elements in encouraging training participants to perceive how change can be managed differently. In the CMCI, serious game simulations function as complex and challenging change events, of which managers are required to make sense. In our study, we brought novel perspectives to the analysis of the development of change competencies of managers participating in change management training in our analyses of how the participants made sense of the CMCI and its serious game simulations.

### **The Case: Lean Implementation and CMCI in Novozymes**

Our case study focused on the Danish biochemical enzyme company Novozymes A/S, where the CMCI project was initiated to develop the change management competencies of their managers and support their implementation of “Lean” in their production and supply chain departments. Novozymes supplies products to the global market. The competitive market for enzyme production has led to a demand for increasing the efficiency of production processes, which has been achieved by the strategic implementation of several Lean production tools. These tools have included techniques, meetings, visualizations, and boards that have been applied to support production monitoring, subsequent problem solving, and implementing initiatives (Womack et al., 1991).

Novozymes previously attempted to implement Lean in some departments, but the company struggled with convincing employees to adhere to the implemented Lean tools and comply with agreements and new work standardizations, which were mandated through the Lean management system. Consequently, there was an increased focus on how to improve managers’ change management competencies to support the implementation of Lean and increase the value potential of the Lean activities that emerged. The Lean office and the supply chain senior management in

Novozymes saw the potential to improve the competencies of the managers in approaching their Lean-related tasks with greater sensitivity to the dimensions of change management, which is understood as the human side of change. This led to the development of the CMCI, which is based on serious game simulations that were developed and facilitated by the change agency Workz A/S.

### **The Change Management Competency Intervention (CMCI)**

The CMCI consisted of four days of workshops that focused on developing an understanding and vocabulary for the human side of change management. Because managers influence each other, and middle management interacts with line management in implementing change, it was decided that the participants in the CMCI were drawn from managerial groups. The head and all line managers of the participating departments were invited. The five participating departments were under the management of three senior managers (i.e., plant managers), two of whom also participated in the workshops. The core content of the CMCI, was developed by the consultancy Workz A/S, included a range of change-related topics aimed at understanding, identifying, and addressing resistance (Maurer, 2010), understanding the different phases of change, balancing stability and change (Kotter, 1996), as well as influencing and managing stakeholders (Thomas, 1988).

#### **Box 9.1: Wallbreakers – a change management serious game simulation**

The core serious game simulation used was the game Wallbreakers, which is a decision-making game that was run within two days of the workshop. The game is based on the fictitious case of a merger-acquisition involving the buyout of an older, small IT company named Nordicon by a larger and more modern international company named TLA. In the game, the participants were divided into groups and tasked with making decisions as managers of a merged department. The game included extensive background material on the case, such as the bios of the 10 employees in the department.

The simulation uses metaphors of change in which the departments were represented as moving buses and the employees as play pieces either on or off the bus; those not on the bus exhibited some

level of change resistance. The learning mechanisms in the game primarily involve decision-making. The participant groups are presented with the choice of prioritizing either change or stability in each of three change phases: start-up, implementation, and anchoring. In each phase, the participants are also tasked with choosing four of 12 management actions. These actions affect the level of resistance of employees in the simulation and progress of the change.

Several times during the game, facilitators linked the events in the game to the participants' actual change management challenges by asking questions such as "How does the choice you made in the game reflect the way you usually manage change?" At the end of the game, the participating managers were asked to develop both a personal and a detailed departmental action plan of what they planned to do differently with regard to change management when they returned to their departments after the workshops.

In the workshops, a combination of change management serious game simulations (notably the serious game simulation Wallbreakers, (see box 9.1), reflective interviewing, roleplay exercises, and theory lectures (see box 9.2). The simulations also focused on individual differences in both change reactions and change management, and personality and managerial typologies were used to illustrate them (Myers et al., 1998; Owen et al., 2017).

**Box 9.2: Structured dialogue exercise – Backtalk**

In the CMCI, specific structured dialogue exercises were used to encourage the participants to think about their change management practices. A key tool that was used multiple times was a backtalk exercise, which was derived from narrative psychological techniques of using outsider-witnesses (Carey & Russell, 2003). During the exercise, the participants were organized into smaller groups of three to four participants. One participant functioned as an interviewee who talked about their change dilemmas; another participant interviewed the interviewee and posed illuminating questions; and the third and fourth persons in the group remained silent during the interview. After the interview, the silent observer(s) disclosed their reflections and perspectives on the interview they had just witnessed.

### **Structured dialogue exercise – Role playing**

Another dialogue tool used in the training was roleplaying exercises. In one workshop, the participants roleplayed an interaction between a manager and an employee, the premise of which was that the employee had some degree of resistance to change. During the roleplay, the participant playing the manager was tasked with identifying the level and form of resistance in the participant who roleplayed the employee. As in the backtalk exercise, one or two participants functioned as observers. The participant who played the role of manager had the option of declaring timeouts during the roleplay to discuss the situation with the observers.

The researchers participated in the planning of the workshops and observed the training sessions. The Novozymes Lean consultant participated in the workshops by bringing a Lean perspective to the discussions, and consultants from Workz facilitated the workshops.

## **Methods**

The evaluation was designed to provide comprehensive data on the participants' experiences of the CMCI. A focused data collection strategy (Abildgaard, 2018) was applied. Interview data were collected both immediately after the workshops and after a follow-up period. The participants included three senior managers (i.e., plant managers), five middle managers (i.e., department heads), and 19 line managers.

### **Data Sources**

An overview of the data sources is presented in Table 1.

**Table 9.1**  
*Data sources*

<b>Data source</b>	<b>Data type</b>	<b>Amount of data</b>
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Telephone interviews	Recordings of interviews with training participants 1–2 days after training	27 interviews, avg. length 30 minutes
Follow-up interviews	Recordings of interviews with training participants 4–6 months after training	29 interviews, avg. length 40 minutes

We conducted semi-structured (Brinkmann & Kvale, 2015) telephone interviews with around three to four participants one to two days after each workshop in the CMCI. The telephone interviews focused on experiences in the workshop, the managers' evaluations of the workshop components, and their learning from the workshop. All participating managers were interviewed in-person, in semi-structured follow-up interviews four to six months after the last training session. The follow-up interviews focused on how the participants had applied the learning from the training course in practice, their experiences in change management in general, and Lean implementation in particular. The interviews were transcribed verbatim in Danish and translated by the authors from Danish to English.

### **Data Analysis**

A thematic analysis was conducted on the data collected (Boyatzis, 1998). An iterative process was used to first code the data corpus, identify salient themes in the coded data, review and refine themes, and define them (Braun & Clarke, 2012). In identifying themes, we went through stages of coding. We first conducted topic coding (Saldaña, 2015) to identify relevant passages in the data in which change management competencies were exposed or addressed. In this stage, the output was a corpus of data that was analyzed in more depth in the subsequent stages.

Inductive coding was conducted in the second stage of the data analysis (Saldaña, 2015). The interview and workshop data were reviewed to identify relevant themes. In this stage, the relevance of applying a sensemaking perspective became apparent. In the second stage of coding, the conceptualization of the sensemaking lens led to the identification of three specific themes for further analysis: “Learning that change perceptions are situated and individual”; “Learning to make sense of your own role in change processes”; and “Reflections on learning and changed change management competencies.”

In the third stage, the entire data corpus was reexamined to identify situations in which these three themes appeared, and a finer-grained and sensemaking theory-based analysis of the data was conducted, which focused on how the roles played in sensemaking processes in the CMCI led to the development of change management competencies. This process led to the inclusion of further examples and the re-theorization of some case examples compared with other examples.

The presentation of the interviews drew inspiration from a narrative approach (Czarniawska, 1998; Riessman, 1993, 2002), specifically by applying a thematic narrative style (Riessman, 1993). The managers were encouraged to talk about phenomena related to the three themes. This allowed the researchers to follow the thoughts and arguments of the interviewees in relation to the themes identified in the analysis. The presentation of themes in the results is structured so that two themes that focus on immediate sensemaking processes are presented first, and the third theme, which focuses on sensemaking and reflections on learning and change competencies, is presented last. The chronology allows the readers to follow the sensemaking processes of the managers from their initial reflections after the CMCI to subsequent reflections on the applicability of the training to their own change management practice.

## **Results**

### **Theme 1: Learning that Change Perceptions Are Situated and Individual**

One learning experience that had a profound impact on the participants in the CMCI concerned the following: sentiments regarding the change process are highly individualized phenomena rooted in the context and identity of the change recipients. Experiencing the individualized sentiments of employees, which were caricaturized in the serious game simulations, shifted the sensemaking of the participants from trying to make sense of a homogeneous group of employees to trying to make sense of a collective of individuals. One participant explained the following:

*Line manager: Well, I think, when I was there, I actually thought it was very beneficial, but perhaps not completely new to me, the theories, that is, but I still think I got something with me that I have used afterwards. [...] because we have made a lot of changes. For some, they might seem small, but when you think about that it is people's*

*daily lives, you are changing. So, the changes are actually larger than they initially appear. That is actually what I took with me from the course. That is, I got a better understanding of what is hard for people, and why they don't move.*

This shift in sensemaking was an important step toward developing change management competencies. Understanding and internalizing that each employee and manager had their own ongoing processes of making sense of the organizational change was part of the foundation of a change management position that was more sensitive to the complexity of the ongoing processes of organizing. Such shifts do not simply involve learning pieces of information. They result from a process that involves a change in perception and sensemaking. Experiencing and making sense of the complexity of individual change reactions were central components of the sensemaking processes that occurred after the CMCI.

The finding that participating managers understood that individuals react differently to change was evidenced by a plant manager who explained that his primary takeaway from the course had been a heightened awareness of the causes of resistance and, crucially, how some employees might be more reluctant to change than they were.

*Plant manager: I think, on my behalf, because I have been a driver in this development, I have gained a slightly better understanding of what keeps people from jumping on the bus. The things that inhibit you from stepping in front of your co-workers and talking about stuff are in reality everyday things and work stuff and how it can be difficult for some. I think I got a broader understanding of those dynamics.*

*Interviewer: Can you elaborate on that understanding?*

*Plant manager: Ehm [long pause] Yeah, I think some of it [the course content] I knew already, resistance to change and its causes, and how it is often about insecurity. It's also about personality, some people have a personality of – what to call it - 'maintain' [uses the English word] – that you stay in the same patterns. Then it is a much bigger step to do something different, and it almost takes a certain degree of – almost threats [laughs] of discomfort in order to make people move. An image that I find enticing is*

*not necessarily one that others find appealing. That is the lesson that I took with me from the training course. What I gave most thought when I came back to the plant was what it is that keeps people from participating. Yeah, I thought a lot about that.*

A substantial sensemaking process occurred in how the managers reflected on change management after the workshops. Even though the managers knew much of the formal curriculum in advance, playing the serious game simulations and reflecting on change with fellow managers affected their sensemaking and initiated a process of reflecting on their own management practices. The results showed not only the awareness of individual differences but also how this awareness contributed to self-awareness and developing change management competencies. Specifically, the managers on the production site improved by being attentive to individual and context-specific processes that underpinned change reactions.

## **Theme 2: Learning to Make Sense of Your Own Role in Change Processes**

The second line of learning and reflections was related to managers shifting their attention from making sense of their employees' change reactions to reflecting their own roles and positions in change processes. As the managers developed nuanced understandings of employees' reactions, they began to question and reflect on their own roles in change processes. These reflections included questions about self-identity as change managers and an understanding of how to manage change. The experiences in the CMCI presented the managers with new ways of making sense of change, which they integrated in nuanced ways to make sense of what change management entails. One manager articulated the following:

*Head of department: ...I'm pretty sure - I can only speak for myself, but I also hope that the others feel this way—that we have become more aware that people are different. People need to be treated differently to get them involved. And this is something we have reflected a lot on afterwards—the thing about making sure to also just take a chat with those who were sitting in the back of the bus.*

Here, the understanding that people are different and that some are likely to enact degrees and forms of resistance was coupled with the direct imperative that managers should ensure that they communicate with change-resistant employees. This excerpt illustrates the link between sensemaking,

that is, becoming more aware that people are different, and enacting change management competencies (i.e., communicating with those who are resistant to change). When sensemaking has changed, perceptions and actions are likely to change accordingly. Asked specifically what had changed in his managerial behavior, the department head elaborated as follows:

Head of department: *So, personally, then I think that it is very strong, that picture, when you have made some decisions [in the simulation] and you move the bus on, and say 'okay, I got two men with a pure heart with the rest they are foot-dragging', right? That really gives rise to reflection on the way you usually think [...]. I know very well that when I get a good start, when I start the engine up and then run full throttle, and things run smoothly, then we reach our goals. But maybe it would be better if I got some more people on board, because then—what do you call it – 'the sustainability' [uses English term], the process of change itself, would give something. [...]. So, I have worked a lot afterwards with myself, just trying to tone down my need to constantly say, 'it's that way!' and be directive, and then just spend a little more time understanding, 'where are you at?' and 'What do you say to this?' 'I know I think it's awesome, but where are you?', right?*

The manager clearly experienced the training as relevant and became more aware of how he could implement changes in a more sustainable manner. Although he may still be directive and driven in his managerial style, he appeared to have become more attentive to the fact that others might not always be responsive to this management style. He exemplified that changing perceptions of the role of change manager could lead to conducting change more effectively and ensuring that the process itself could be a positive experience that would lead to sustainable results. This development clearly demonstrated that his sensemaking of both change management and himself as a manager had shifted. This change in sensemaking led him to articulate the need to improve his change management competencies in relation to communication and involvement was apparent when he was asked further about a key learning takeaway from the workshop:

Interviewer: *Can you recount specific episodes where you have rediscovered some more reflections and it has led to other decisions or ...?*

Head of department: *I would guess so! I'm having a hard time pinpointing one specific thing right now because it's been so damn long since [the training] .... but when I mass communicate to the [production] site I think a little more about it now, for instance thinking; okay, maybe not everyone is equally motivated by the fact that I think this change is damn cool. But then I try to give a little more background, right? when I communicate. Another thing is that when I happen to be on the shop floor, I ask more questions. And then I try to listen a bit more because that's also what I think it takes, if you want to have more people on the bus, right? Then you also have to understand what goes on. Then you can sometimes think 'it's damn foolish' and so on, but you have to understand it. It's where people are, right. So, I think it's mostly like, if I have to summarize on the personal level, then it's probably that it has shaken up my habits and way of communicating that I've been through this.*

Such reflections demonstrate that although the department head found it difficult to recollect specific episodes, he perceived that changes had occurred in how he communicated and how he regarded his employees and himself. In relation to learning to manage change, this highly relevant example illustrates the complexity of disagreeing with employees and the ability to accept that employees perceive things differently and act or communicate in ways that foster change. Learning to make sense of employees' perceptions and managers' self-perceptions, as well as acting collectively and developing shared sensemaking all serve as competencies of change.

### **Theme 3: Reflections on Learning and Changed Management Competencies**

Although the experiences and shifts in sensemaking presented in the first two themes comprised personal experiences, they consistently pointed in the direction of an increased awareness of employee diversity and recognizing the need to improve change communication. Becoming aware of nuances in change reactions and their diversity led the participating managers to arrive at various positions in learning to better manage change and develop change competencies. One manager articulated these developments clearly:

Line manager: *...concretely much, much more skilled managers by having been through those thoughts of 'why do people react like that'. [...]. I recognize the patterns when I think of situations where I have been involved in implementing major changes.*

Other managers reported that they did not think much about the CMCI after the workshops, and they had mostly forgotten the personal action plans they had developed. However, these managers recounted situations that led them to recall and draw on their experiences at the CMCI. This exemplifies that the change management competencies learned at the workshop were tied to sensemaking processes, in contrast to learning about theories and models. The ongoing process of making sense of the world had been slightly adjusted, and experiences in the CMCI had shifted their focus to being attentive to managing changes more competently. One manager articulated the fleeting nature of takeaways from the change management training intervention:

Head of department: *There are probably some elements I take with me; right now, we are actually right now facing a mega-size change in my department. So, there are some things that pop-up when we're just talking about the changes, - 'oh, there was something about a game', and 'there's something about communication here', and so on. So, I also filled out [the action plan] at the workshop. But I simply have not looked at it subsequently.*

A complication of analyzing the sensemaking processes in the CMCI is that it was difficult for the participants to separate which aspect of management practice and Lean implementation stemmed from the CMCI, and which were due to other initiatives in the workplace. Although the findings indicated that the participants combined learning and development, a distinct change in sensemaking regarding the complexity of change and change management appeared to have originated in the CMCI. For example, one manager explained that even though she was unable to separate various initiatives, she had a clear understanding that the CMCI had increased her awareness of change management and hence made her better equipped to ensure that her employees took part in change processes.

Line manager: *It's unclear what is [the CMCI 's] fault, and what is due to all the other activities; but the employees have been made aware of the fact that "well, you actually*

*have a role and you have to provide something to show that you are taking initiative and you have to be involved and be a part of this". And you could say that if we had not had [the change management training intervention], then we might not have thought about what is happening in the process, and then we might not have been so aware of it.*

These examples of how experiences from the CMCI affected change management demonstrate that the link between learning and sensemaking is complex. Moreover, although it is an individual endeavor, it is tied to cultural cues and ongoing social processes. When most of the managers in a team reflected on similar themes, a collective shift in sensemaking emerged, and learning change management competencies took place in both individuals and the organization. The experiences of another line manager illustrated this shift, and how it, in his opinion, had led to the successful implementation of change while taking into account employee wellbeing:

*Line Manager: What I have reflected most on, since I came back [to the department from the course] has been that stuff about, what is it that keeps people from supporting change...Yeah, I have given it much thought.*

*Interviewer: Yes, and when I ask about the outcome, you have thought a lot about it, but what has it given the department?*

*Line manager: It has at least given the department that I have...My approach to change has become more nuanced than what I would normally have done. I think we can call it something we have gained as a department. We have successfully implemented [Lean] without a long line of sick and injured afterwards.*

The line manager making the connections between a more nuanced approach to change management, and how it led to implementation success without sacrificing employee wellbeing is a clear example of the important role of sensemaking processes for the CMCI to foster a development in change management competencies.

## **Discussion**

The results of the analysis shed light on the sensemaking processes at play in the CMCI. First, we demonstrated that the participants experienced a heightened awareness of employees' individual change reactions as a result of participating in the CMCI and reflecting on the serious game simulations. Experiencing change reactions as both individual and collective phenomena increased the managers' awareness of nuances in employee change reactions. Second, we followed the managers in their reports of having become more aware of their own change management practices. The reflexivity led to possibilities of managing change differently, specifically by making sense of one's own change management behavior and its link to change competencies. Third, the findings demonstrated that learning from the CMCI manifested in a complex of developments that were intertwined with other initiatives.

A common denominator in the participants' experiences was that the CMCI had led them to become more attentive to change and develop change competencies through reflecting on change management. The findings of our study showed that change management training initiatives, such as the CMCI, can foster learning and improve managers' change management competencies by affecting the ways in which they reflect on their subordinates, themselves, their managerial practices, and therefore their sensemaking processes.

### **Sensemaking and Learning in the CMCI**

Our findings indicated that the participants' sensemaking processes began with reflections on the CMCI and their current situations. In line with sensemaking theory (Weick, 1995), sensemaking can be seen as a link between reflections on the past and behavior, cognition, and thinking in the future. The combination of reflection, dialogue, and serious game simulations appeared to be a fruitful platform for sensemaking and for the managers to attain new change management competencies. As mentioned in the literature and exemplified in the results of the data analysis, sensemaking and learning are closely connected phenomena (Colville et al., 2016). The learning–sensemaking link observed in the CMCI is evidence for the efficacious use of serious game simulations and other experiential learning tools in change management training (Wilson & Beard, 2013). The managers in our study experienced that learning was closely tied to personal experience. They used reflections on the serious game simulations and other experiential elements to facilitate subsequent sensemaking.

The implications for change management training are that serious game simulations and other experiential learning elements comprise useful strategies for ensuring that even experienced managers can internalize learning and develop change competencies (Argyris, 1991).

### **Link Between Reflexive Sensemaking and Change Management**

A consistent point made by the participating managers was that the CMCI has made them aware that employees react individually when change occurs. The participants had experienced the destabilization of their assumptions about employee reactions to change, which made them aware of the complexity and diversity of meaning-making among employees. Destabilization may be undesirable, but in the case of change management competencies, it is arguably a positive development. According to the classic “unfreeze-change-refreeze” model of change (Lewin, 1947), a substantial force is needed to destabilize status quo reasoning (Burnes, 2012). Unfreezing can, in itself, be a complicated task, as entrenched opinions and positions often support current opinions and reasoning. The fact that the findings of the present study demonstrated that the change management training intervention increased not only the managers’ attentiveness to nuances in change management but also their interest in better ways of managing change management is a substantial argument for change management training.

The CMCI managers did not report that they took standardized solutions home from playing the serious game simulations. However, they reported being more aware of and having new perspectives on change. Subsequently, based on their new, wider repertoire of change management competencies, they could be able to face change management challenges and improvise accordingly. Raising the managers’ awareness of a diverse repertoire of change management actions and perspectives is an important part of the sensemaking processes at play in the CMCI. While the CMCI seemingly “unfroze” the participants’ perspectives on change management competencies and led them to new sensemaking, their direction and “refreezing” was less controllable.

### **Implications for Change Management Training**

The results of the change management training presented in the present chapter had both agential and reflective effects on the participants’ change management competencies. The initial intention of the CMCI, and potentially other change management programs, was to help managers

learn how to achieve better change implementation and reduce employee resistance. A pervasive finding in this study was that the participants reflected primarily on their practice and their employees rather than simply internalizing the behaviors presented in the training. Even though reflection may not seem attractive when change is taking place, it may form a foundation for continuing the development of change management practices (Corley & Gioia, 2003; Weick, 1991). Sensemaking is inextricably bound to perceptions, relations, and identity (Weick, 1995). The process of destabilizing managerial sensemaking is a necessary stepping stone to achieving novel change competencies. The subsequent possibilities of increased curiosity about employees and themselves both motivate and facilitate psychologically sound change (Ala-Laurinaho et al., 2017).

A further implication of the findings concerns the relevance of initiatives, such as the CMCI. Discussing and reflecting on change with a managerial group is not necessarily possible during a hectic workday. In this study, the participating managers were given the opportunity to discuss and reflect on how they and their organization managed change. Such reflections are an important vehicle for learning through sensemaking processes (Colville et al., 2016). As the findings of this study demonstrated, the participants experienced changes related to sensemaking, which led to the development of various aspects of change management competencies, both individually and collectively.

Individual and collective sensemaking may foster an increased focus on change management and more nuanced approaches to handling employee reactions to organizational change. Managers who participate in change management training have the potential to develop their change competencies by making sense of their roles in change management and increasing their awareness of how their employees react to changes.

Sensemaking is a crucial component in ensuring that managers participating in change management training arrive at a nuanced understanding of the psychology of the employees for whom they are responsible. A key example is a manager who emphasized that he had become more aware that he tended to appreciate new initiatives more than the employees did. Learning to integrate such sensemaking into managerial practice is clearly part of the foundation for developing change competencies and good change management.

## Conclusion

In this chapter, we analyzed the sensemaking processes at play in change management training. We emphasized that the CMCI led to changes by utilizing experiential learning and sensemaking processes to facilitate learning about and developing change competencies. Sensemaking processes and interactions with experiential elements in change management training can lead to surprising and personal learning that helps participants make sense of their own roles in change and find ways forward regarding the development of their change management competencies. Finally, as the findings of our study demonstrated, sensemaking processes in the CMCI were collective because learning and sensemaking were congruent across the participants, and they were individual and based on each manager's reflection on their own practice. The participating managers made sense of how they currently performed change management and how they wanted to perform change management in the future as both individual managers and as members of a managerial group.

## References

- Abildgaard, J. S. (2018). Tricks of the trade—Practical advice from the PIPPI project for evaluating organizational interventions. In K. Nielsen & A. Noblet (Eds.), *Organizational Interventions for Health and Well-being—A Handbook for Evidence-Based Practice* (pp. 144–166). Routledge.
- Abildgaard, J. S., & Nielsen, K. (2018). The Interplay of Sensemaking and Material Artefacts during Interventions: A Case Study. *Nordic Journal of Working Life Studies*, 8(3).  
<https://doi.org/10.18291/njwls.v8i3.109538>
- Abt, C. C. (1987). *Serious games*. University Press of America.
- Agger, A., & Møller, M. (2018). Leadership development simulations From the best of intention to real-life balance. In S. Gudiksen & J. Inlove (Eds.), *Why Innovators and Changemakers use Games to break down Silos, Drive Engagement and Build Trust* (pp. 139–154).

- Ala-Laurinaho, A., Kurki, A.-L., & Abildgaard, J. S. (2017). Supporting Sensemaking to Promote a Systemic View of Organizational Change – Contributions from Activity Theory. *Journal of Change Management*, 17(4), 367–387. <https://doi.org/10.1080/14697017.2017.1309566>
- Andersen, T. K. (2018). Understanding the Success or Failure of Organizational ICT Integration: The Criticality of Managerial Involvement. *Journal of Change Management*, 18(4), 327–343. <https://doi.org/10.1080/14697017.2018.1491482>
- Argyris, C. (1991). Teaching smart people how to learn. *Harvard Business Review*, 69(3), 99–109.
- Armenakis, A. A., & Bedeian, A. G. (1999). Organizational Change: A Review of Theory and Research in the 1990s. *Journal of Management*, 25(3), 293–315. <https://doi.org/10.1177/014920639902500303>
- Balogun, J., & Johnson, G. (2005). From Intended Strategies to Unintended Outcomes: The Impact of Change Recipient Sensemaking. *Organization Studies*, 26(11), 1573–1601. <https://doi.org/10.1177/0170840605054624>
- Battilana, J., Gilmartin, M., Sengul, M., Pache, A.-C., & Alexander, J. A. (2010). Leadership competencies for implementing planned organizational change. *The Leadership Quarterly*, 21(3), 422–438. <https://doi.org/10.1016/j.leaqua.2010.03.007>
- Bickerich, K., Michel, A., & O’Shea, D. (2018). Executive coaching during organisational change: A qualitative study of executives and coaches perspectives. *Coaching: An International Journal of Theory, Research and Practice*, 11(2), 117–143. <https://doi.org/10.1080/17521882.2017.1407806>
- Boyatzis, R. E. (1998). *Transforming Qualitative Information: Thematic Analysis and Code Development*. Sage.
- Braun, V., & Clarke, V. (2012). *Thematic analysis*.
- Brinkmann, S., & Kvale, S. (2015). *Interviews: Learning the Craft of Qualitative Research Interviewing*. Thousand Oaks, CA: Sage.
- Burnes, B. (2012). Kurt Lewin and the origins of OD. In D. M. Boje, B. Burnes, & J. Hassard (Eds.), *The Routledge companion to organizational change* (pp. 29–44). Routledge.

- Carey, M., & Russell, S. (2003). Outsider-witness practices: Some answers to commonly asked questions. *The International Journal of Narrative Therapy and Community Work.*, 1.
- Colville, I., Pye, A., & Brown, A. D. (2016). Sensemaking processes and Weickarious learning. *Management Learning*, 47(1), 3–13. <https://doi.org/10.1177/1350507615616542>
- Corley, K. G., & Gioia, D. A. (2003). *Semantic learning as change enabler: Relating organizational identity and organizational learning*.
- Czarniawska, B. (1998). *A Narrative Approach to Organization Studies*. SAGE Publications, Inc.
- de Jong, T., Wiezer, N., de Weerd, M., Nielsen, K., Mattila-Holappa, P., & Mockało, Z. (2016). The impact of restructuring on employee well-being: A systematic review of longitudinal studies. *Work & Stress*, 30(1), 91–114. <https://doi.org/10.1080/02678373.2015.1136710>
- Faria, A. J., Hutchinson, D., Wellington, W. J., & Gold, S. (2009). Developments in business gaming: A review of the past 40 years. *Simulation & Gaming*, 40(4), 464–487.
- Guiette, A., & Vandenbempt, K. (2016). Learning in times of dynamic complexity through balancing phenomenal qualities of sensemaking. *Management Learning*, 47(1), 83–99. <https://doi.org/10.1177/1350507615592112>
- Have, S. ten, Have, W. ten, Huijsmans, A.-B., & Eng, N. van der. (2015). *Change competence, implementing effective change* (1. ed.). Routledge. <http://ep.fjernadgang.kb.dk/login?url=https://www.taylorfrancis.com/books/9781317553779>
- Higgs, M., & Rowland, D. (2000). Building change leadership capability: ‘The quest for change competence.’ *Journal of Change Management*, 1(2), 116–130. <https://doi.org/10.1080/714042459>
- Higgs, M., & Rowland, D. (2011). What Does It Take to Implement Change Successfully? A Study of the Behaviors of Successful Change Leaders. *The Journal of Applied Behavioral Science*, 47(3), 309–335. <https://doi.org/10.1177/0021886311404556>
- Iveroth, E., & Hallencreutz, J. (2015). *Effective Organizational Change: Leading through sensemaking*. Routledge. <https://doi.org/10.4324/9781315796888>
- Jordan, M. E., Lanham, H. J., Crabtree, B. F., Nutting, P. A., Miller, W. L., Stange, K. C., & McDaniel, R. R. (2009). The role of conversation in health care interventions: Enabling

- sensemaking and learning. *Implementation Science*, 4(1), 15. <https://doi.org/10.1186/1748-5908-4-15>
- Kolb, A. Y., & Kolb, D. A. (2005). Learning Styles and Learning Spaces: Enhancing Experiential Learning in Higher Education. *Academy of Management Learning & Education*, 4(2), 193–212. <https://doi.org/10.5465/amle.2005.17268566>
- Kotter, J. P. (1996). *Leading Change*. Harvard Business Press.
- Krummacker, S., & Vogel, B. (2013). An In-Depth View of the Facets, Antecedents, and Effects of Leaders' Change Competency: Lessons From a Case Study. *The Journal of Applied Behavioral Science*, 49(3), 279–307. <https://doi.org/10.1177/0021886312469442>
- Kurz, R., & Bartram, D. (2002). Competency and Individual Performance: Modelling the World of Work. In *Organizational Effectiveness* (pp. 227–255). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9780470696736.ch10>
- Lewin, K. (1947). Frontiers in Group Dynamics: Concept, Method and Reality in Social Science; Social Equilibria and Social Change. *Human Relations*, 1(1), 5–41. <https://doi.org/10.1177/001872674700100103>
- Lundmark, R., Hasson, H., Schwarz, U. von T., Hasson, D., & Tafvelin, S. (2017). Leading for change: Line managers' influence on the outcomes of an occupational health intervention. *Work & Stress*, 31(3), 276–296. <https://doi.org/10.1080/02678373.2017.1308446>
- Lüscher, L. S., & Lewis, M. W. (2008). Organizational Change and Managerial Sensemaking: Working through Paradox. *The Academy of Management Journal*, 51(2), 221–240. <https://doi.org/10.2307/20159506>
- Maitlis, S., & Christianson, M. (2014). Sensemaking in Organizations: Taking Stock and Moving Forward. *The Academy of Management Annals*, 8(1), 57–125. <https://doi.org/10.1080/19416520.2014.873177>
- Maurer, R. (2010). *Beyond the wall of resistance: Why 70% of all changes still fail—and what you can do about it*. Bard Press.
- Moon, J. A. (2013). *A handbook of reflective and experiential learning: Theory and practice*. Routledge.

- Myers, I. B., McCaulley, M. H., Quenk, N. L., & Hammer, A. L. (1998). *MBTI manual: A guide to the development and use of the Myers-Briggs Type Indicator* (Vol. 3). Consulting Psychologists Press Palo Alto, CA.
- Nielsen, K., Randall, R., & Christensen, K. B. (2010). Does training managers enhance the effects of implementing team-working? A longitudinal, mixed methods field study. *Human Relations*, 63(11), 1719–1741. <https://doi.org/10.1177/0018726710365004>
- Olsen, E. L., Wåhlin-Jacobsen, C. D., & Abildgaard, J. S. (2020). Reconceptualizing Job Control in Participatory Interventions – Collective Sensemaking as a Missing Link. *Nordic Journal of Working Life Studies*. <https://doi.org/10.18291/njwls.122137>
- Owen, J. E., Mahatmya, D., & Carter, R. (2017). Dominance, Influence, Steadiness, and Conscientiousness (DISC) Assessment Tool. In V. Zeigler-Hill & T. K. Shackelford (Eds.), *Encyclopedia of Personality and Individual Differences* (pp. 1–4). Springer International Publishing. [https://doi.org/10.1007/978-3-319-28099-8\\_25-1](https://doi.org/10.1007/978-3-319-28099-8_25-1)
- Riessman, C. K. (1993). *Narrative analysis*. Sage.
- Riessman, C. K. (2002). Narrative Analysis. In A. Huberman & M. Miles, *The Qualitative Researcher's Companion* (pp. 216–270). SAGE Publications, Inc. <https://doi.org/10.4135/9781412986274.n10>
- Saldaña, J. (2015). *The Coding Manual for Qualitative Researchers* (3rd ed.). SAGE Publications Ltd.
- Sartori, R., Costantini, A., Ceschi, A., & Tommasi, F. (2018). How Do You Manage Change in Organizations? Training, Development, Innovation, and Their Relationships. *Frontiers in Psychology*, 9. <https://www.frontiersin.org/article/10.3389/fpsyg.2018.00313>
- Schwandt, D. R. (2005). When Managers Become Philosophers: Integrating Learning with Sensemaking. *Academy of Management Learning & Education*, 4(2), 176–192. <https://doi.org/10.5465/AMLE.2005.17268565>
- Tafvelin, S., Hasson, H., Nielsen, K., & von Thiele Schwarz, U. (2021). Integrating a transfer perspective into evaluations of leadership training. *Leadership & Organization Development Journal*, 42(6), 856–868. <https://doi.org/10.1108/LODJ-11-2019-0492>

- Teulier, R., & Rouleau, L. (2013). Middle Managers' Sensemaking and Interorganizational Change Initiation: Translation Spaces and Editing Practices. *Journal of Change Management*, 13(3), 308–337. <https://doi.org/10.1080/14697017.2013.822674>
- Thomas, K. W. (1988). The Conflict-Handling Modes: Toward More Precise Theory. *Management Communication Quarterly*, 1(3), 430–436. <https://doi.org/10.1177/0893318988001003009>
- Todnem By, R. (2005). Organisational change management: A critical review. *Journal of Change Management*, 5(4), 369–380. <https://doi.org/10.1080/14697010500359250>
- Vignoli, M., Nielsen, K., Guglielmi, D., Mariani, M. G., Patras, L., & Peirò, J. M. (2021). Design of a safety training package for migrant workers in the construction industry. *Safety Science*, 136, 105124. <https://doi.org/10.1016/j.ssci.2020.105124>
- Weick, K. E. (1991). The nontraditional quality of organizational learning. *Organization Science*, 2(1), 116–124.
- Weick, K. E. (1993). The collapse of sensemaking in organizations: The mann gulch disaster. *Administrative Science Quarterly*, 38(4), 628. <https://doi.org/10.2307/2393339>
- Weick, K. E. (1995). *Sensemaking in Organizations*. Sage.
- Weick, K. E. (2007). Drop your tools: On reconfiguring management education. *Journal of Management Education*, 31(1), 5–16.
- Weick, K. E. (2010). Reflections on enacted sensemaking in the Bhopal disaster. *Journal of Management Studies*, 47(3), 537–550. <https://doi.org/10.1111/j.1467-6486.2010.00900.x>
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16(4), 409–421.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2008). Organizing for high reliability: Processes of collective mindfulness. *Crisis Management*, 3, 81–123.
- Wilson, J. P., & Beard, C. (2013). *Experiential learning: A handbook for education, training and coaching*. Kogan Page Publishers.
- Womack, J., Jones, D., & Roos, D. (1991). *The machine that changed the world: The story of lean production*. Harper Perennial.