

The barriers to nurturing and empowering long-term care experiments – Lessons learnt to advance future healthcare projects

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Abstract

The objective of this study is to explore the barriers to nurturing and empowering subsidized long-term care experiments that try to deal with today's long-term care challenges such as an aging population and increasing healthcare costs. Nurturing is the process of planning, implementing, and learning from experiments. The empowerment process deals with stabilizing experiments into the existing long-term care system. This is a qualitative study of a network that nurtured and tried to empower three long-term care experiments, which were subsidized by a ministerial transition program (2009–2011) in the Netherlands. In total, 14 open-ended, semi-structured interviews were conducted. Further data were collected through participation, collecting documents, and pursuing a focus group. The findings revealed eight barriers to nurturing and empowering the experiments. During the planning of the experiments, top managers and consultants were (1) *lacking time*, (2) *ignored the local context*, and (3) *did neither engage project managers nor professionals*. At the start of the experimentation, project managers and professionals were *lacking* (4) *motivation*, (5) *time*, and (6) *support* while there was (7) *no sense of urgency* to experiment. Finally, there was (8) *no commitment* from the top managers during the empowerment of the experiments. In conclusion, future projects have to try to avoid these barriers. Otherwise, time, money, and energy are lost in overcoming these barriers, which are needed to deal with today's long-term care challenges.

Keywords: Empowerment, Long-term care innovations, Nurturing, Project management, Strategic niche management, Subsidy

Introduction

Today, developed country's healthcare systems face two major problems, increasing healthcare costs¹ and an aging population^{2,3} resulting in a growing demand for healthcare services⁴ and the restructuring of healthcare organizations.⁵ Therefore, a transition is needed which means moving away from a fragmented, supply driven towards an integrated, demand-driven healthcare system in order to improve the quality of care and increasing operational efficiency to assure long-term care for everyone.^{1,2,4,6,7}

However, trying to change a system in a short period of time is overly ambitious.^{8–10} According to strategic niche management (SNM) change starts with initiatives on the local level pursuing experiments that might become more stable, being able to change the system in the long run.^{8,10–12} SNM is closely related to transition management (TM).¹⁴ As with SNM, TM views experiments as essential to change systems.¹⁵ However, the difference is that SNM can be described as an evolutionary approach, whereas TM is a goal-oriented approach.^{14,15} TM first forms a vision and then starts to experiment, while the opposite occurs in SNM which starts with experimenting, and then the vision evolves throughout the process.¹⁵ Recently, the two concepts have started to increasingly converge.¹⁴ Yet, previous literature mainly focused on the overall change processes and less on the individual experiments.

An exemption is Loorbach and Rotmans'¹³ study on transition management in long-term care. They provide evidence for two successful experiments

that started to scale-up. These experiments took part in a Dutch transition program for long-term care, which also enabled another 24 niche-innovation projects that were running between 2007 and 2011. The transition program perceived all 26 niche-innovation projects to be radical and able to change the long-term care system.^{10,13} How the different projects were chosen can be found in van den Bosch's¹⁰ thesis on transition experiments. Unlike Loorbach and Rotmans' examples, many other experiments were not successfully nurtured and empowered. Hence, the question is why they were not successfully nurtured and empowered. Nurturing is the process of planning experiments, managing stakeholder expectations, supporting learning processes, and organizing social networks that support the experiments. The empowerment process deals with scaling-up the experiments such that they become dominant practices in the existing long-term care system without requiring any further subsidies.¹⁶ Loorbach and Rotmans provide some direction for future research emphasizing that the themes *power* and *people* seem to be critical during transitions and therefore need to be further scrutinized.

This is in accordance to Grin,¹⁷ who points out that there is more to learn from change processes if the emphasis is put on 'the level of micro politics and individual actors'. Similarly, van den Bosch¹⁰ argues that future healthcare research should focus on individuals to understand how change is achieved in experiments. Taking on the perspectives of individuals enables the researchers to get a better understanding of the ongoing processes¹⁸ such as the nurturing and empowering of experiments. Therefore, this study explores the barriers to nurturing and empowering experiments by taking on the perspectives of the different actors involved. The findings should help future experiments to avoid those barriers to be able to change long-term care practices. Hence, the following research question is formulated: *What are the barriers to nurturing and empowering subsidized healthcare experiments that aim at changing long-term care practices?*

This is a qualitative study that takes on the different actor views on the management of the experiments. SNM is used as a theoretical framework to study the experiments. The remainder of the paper is structured as follows. Next, the theoretical background of SNM is outlined briefly. This is followed by the research methodology including the case description. Then, the results are presented and discussed. Finally, a conclusion is derived.

Theoretical background

A niche is a space in which networks can experiment with radical innovations while being protected from the selection environment of the healthcare system through subsidies or regulative exemptions.^{11,15} In SNM, experiments are used to advance the niche-innovations over time such that at some point the experiments get more structured and stable to be scaled up, which means that the selection environment (e.g. long-term care system) selects one or several of the experiments so that these become dominant practices in the system.^{14,19} Here, we specifically try to explore the barriers to nurturing and empowering the experiments by following these processes over time as the experiments are situated in a niche context.

Experiments in niches are protected by, for instance, governmental exemptions or subsidies.¹⁶ Thereby, Smith and Raven divide the concept of protection into three properties, namely, shielding, nurturing, and empowerment. Shielding is concerned with protecting the experiments from the selection environment. Nurturing are the 'processes that support the development of the path-breaking innovation'.¹⁶ Empowerment is concerned with the stabilization of the experiments, so they get selected by the selection environment and/or they even change the selection environment.¹⁶ Here, we particularly focus on the nurturing and empowerment processes.

During the nurturing phase, experiments are needed to advance the niches as they 'help researchers [to] define problems, discover user preferences, explore possibilities for changing the innovation, and learn how future experiments should be set up. They are especially useful at the very early stages of learning, when there are many uncertainties about the potentials and impacts of an innovation'.¹¹ However, empirical insights into the nurturing process in long-term care is limited¹⁰. The same holds for the empowerment processes.^{10,11,20} Therefore, it is important to study the barriers to nurturing and empowering experiments.

Moreover, little is known about the different perspectives of the various actors in experiments.^{10,13,17,21} Van den Bosch¹⁰ asks for more research that 'elaborate[s] on the role of individuals in [...] experiments', which is in accordance with Grin¹⁷ who asks for more insights on the micro-level processes. Thereby, individual actor perspectives are necessary to comprehensively understand the ongoing nurturing and empowering processes.¹⁸ Consequently, this study explores the barriers to nurturing and empowering long-term care experiments by taking on the different actor perspectives.

Research methodology

The experiments

The data were gathered from a longitudinal research of a Dutch niche-innovation project that consisted of three long-term care experiments and was funded by the Dutch Healthcare Ministry. The project originated out of a network that consisted of an elderly care organization, a mentally disabled-care organization, a project development group, a network firm, and a research institute for applied research. In 2008, the network applied for the transition program and finally received a subsidy for the years 2009 and 2010.

The alliance nurtured three experiments which tried to radically change long-term care practices. The key challenges for the experiments were to cope with an aging population which results in an increasing number of clients while professionals become scarce at the same time. Another challenge the healthcare organizations were facing has been the increasing costs for professional care. Consequently, the future challenge of healthcare organizations is to deliver cost-efficient healthcare for more clients with less professionals while trying to keep or even improve the quality of care.

The first experiment *IT in healthcare* dealt with the development and implementation of an electronic client portal that nursing home and homecare clients could use to access and alter their care provisions. The idea of the elderly care organization was to connect the client portal with the electronic client dossier that was developed simultaneously for the whole organization. The goal of the client portal was that clients can look into their client records, make new appointments, and exchange messages with professionals and family. Thereby, the relationship between the client and the professional should have been changed from supply driven to demand-driven care. So far, the professional delivered a specified service. Now, the client had the possibility to demand the services he or she actually needs. This way the planning of the healthcare services could be outsourced to the clients. In total, 12 clients took part in this experiment. Four homecare clients, four small-scaled housing clients, and four nursing home clients.

The second experiment *community care* dealt with the revitalization of a fragmented community. The goal was to develop new connections between residents and clients as well as among the residents to improve the social cohesion in the community. That way, community care could reduce professional care. The residents start to care about each other while they engage in voluntary work to help the clients in the community taking of 'work'

from the professionals. As a result, the same amount of professionals can take care of a larger amount of clients. Eventually, it reduces the costs per client while the social cohesion increases the quality of life of the clients.

The third experiment *delivering demand-driven care* also dealt with the change from supply driven to demand-driven care. Similar to experiment 1, the goal was that the professionals start to listen to the clients' needs rather than delivering a fixed set of services. The difference was that it was happening in a nursing home, face to face. There were a range of ideas such as letting the client chose how long to sleep in the morning or when to serve breakfast. Another goal of this experiment was to enable the interaction between elderly and mentally disabled-care clients. The mentally disabled-care organization has had a location across the nursing home of the elderly care organization. The idea was that both can benefit, as for example, the elderly could read books for the mentally disabled while mentally disabled can help the elderly by driving them around in the wheel chair or helping to cook. As such, both have been volunteers improving the quality of life for all while easing off the workload of the professionals. Other activities were also taken out such as music nights and barbeques.

The experiments were designed by the concept team in 2009 and monitored by the consortium team and governed by a steering committee in 2010. In addition, a business case team was installed to write a business case based on the experiments, which could be used for future projects. All four teams consisted of consultants and higher management members, while each experiment was taken out by one project manager, several professionals, and additional consultants to support the nurturing and empowerment processes. The general project structure is illustrated in Fig. 1.

Data collection

In 2010, the first author joined the different project teams such as the consortium team and the steering committee as well as the experiment teams. In total, 14 ethnographic interviews were conducted which were taped and transcribed. This included higher management members, project managers, and consultants. The interviews were open and semi-structured, using descriptive, structural, and contrast questions.²² Descriptive questions enable the interviewee to provide his or her view on the underlying topic. An example of a descriptive question was for instance: What is the transition project about? A structural question helps the interviewer to 'understand how informants have organized their

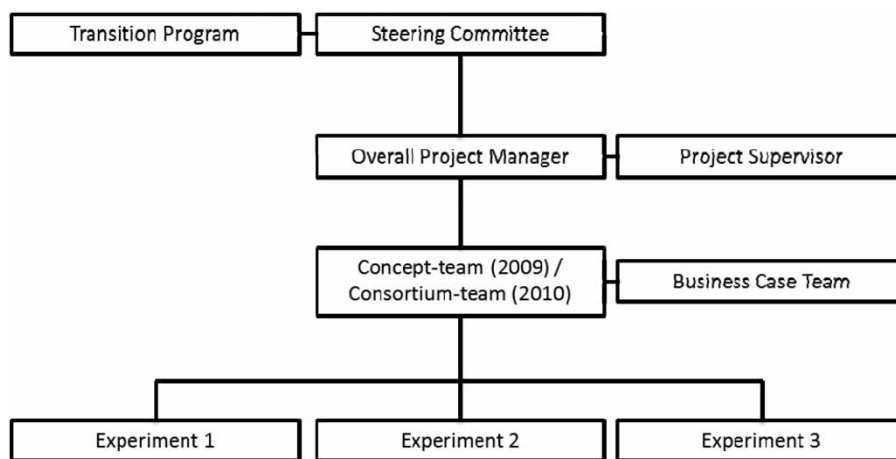


Figure 1. Project structure.

knowledge'.²² An example is: What are the barriers of the project? Or: Are there any other barriers to the experiments? Finally, contrast questions helped to 'find out what an informant means by the various terms used in native language'.²² A contrast question for instance was: Do you think that you planned too much or was it a conflict between the stakeholders?

In May 2011, a focus group session took place to reflect on the experiments and validate the analysis

of the data that was gathered throughout the experiments. A focus group is a group discussion which enables the interaction among the participants in order to "help [them] to explore and clarify their views" and to understand "how they think and why they think in that way".²³ In accordance with previous research, the focus group was semi-structured and open-ended.²⁴ In addition, secondary data were collected to analyze the experiments such as official documents, meeting minutes, and

Table 1: List of interviewees and focus group participants

Organization	Concept team (2009)	Consortium team (2010)	Experiments (2010)	Steering committee (2010)	Business case team (2010)
Elderly care organization	1. Innovation director (project supervisor)*,†	1. Innovation director*,†	1. Project manager 1* 2. Project manager 2* 3. Project manager 3*,† 4. Professional 1† 5. Professional 2†	1. Innovation director*,†	1. Manager 1 2. Manager 2
Mentally disabled-care organization	2. Manager 1*,†	2. CEO* 3. Manager 1*,†		2. CEO*	3. Manager 2*,†
Project development group	3. Consultant 2*,† 4. Consultant 3 (Overall project manager)*,†	4. Consultant 2*,† 5. Consultant 3*,†		3. Consultant 1* 4. Consultant 3*,†	4. Consultant 3*,†
Network firm	5. Consultant 3	6. Consultant 2		5. Consultant 1	
Research Institute	6. Consultant 2* 7. Consultant 3	7. Consultant 2* 8. Consultant 3		6. Consultant 1	5. Consultant 3
Transition program		9. Program team manager 1*,† (and 2)		7. Program team manager 1*,† (and 2)	
University		10. University member 2		8. University member 1 9. University member 2	

*Interviewed.

†Participated in the focus group.

final evaluation reports. Further information about the interviews, the focus group, and the data sources are accessible in the Appendix. The interviewees and focus group participants are listed in Table 1.

Data analysis

The qualitative data analysis software NVivo was used as a tool to analyze the data. NVivo enables the researcher to store, organize, and code the data in order to analyze it with respect to the research question.²⁵ Triangulation by source and method were applied to validate the data to be able to assure accurate interpretations by checking for the consistency of findings.^{26,27} Based on Boeije's²⁸ constant comparative method, six steps were followed to analyze the data:

Step 1: The comparison within a single interview: The analysis started with a line-by-line analysis of the interview with the innovation director, who was the key actor as he was also the *head of the steering committee* as well as the *project supervisor*. During the coding, the researchers were looking for answers to questions like: 'What is the problem here?' or 'What is the person trying to tell?'.²⁹ Thereby, the coding was not entirely open. Rather a combination of open and axial coding was pursued by using a priori constructs of SNM such as *managing visions and expectations*, *forming a network*, or *learning*.¹⁵ The codes that could not be assigned to a priori construct were named according to the action, process, or barrier that it represented. For instance, several members of the project had problems with the consultants so that this was coded as the *problems with consultants*.

Step 2: Comparison between interviews with the same group: Three other interviews with steering committee members were compared with the outcomes of step 1. Existing codes were substantiated while new codes were formed if a text fragment could not be assigned to any of the existing codes or to the a priori constructs.

Step 3: Comparison with groups with different perspectives: Five interviews with members of the consortium team, the business case team, and the experiments have been compared with the outcomes of steps 1 and 2.

Step 4: Comparison with other data: Axial coding was used to find out if the data were coded appropriately and if enough evidence was generated to support the codes.³⁰ Several cluster analyses by word and coding similarity were conducted to support the categorization of the codes by

looking at the differences and similarities of codes. Additional data in the form of documents and meeting minutes were used to substantiate the emerging categories.

Step 5: Comparison with the focus group: Selective coding was used to establish links between the categories to answer the research question.³⁰

More data were needed to further substantiate the links between the categories and to explore if new categories have emerged. Therefore, the focus group was used to confront the participants with the preliminary results. Existing results were verified and further background information was gathered.

Step 6: Comparison with interviews held after the transition program ended: Finally, the results were compared with four interviews with the overall project manager and the three project managers of the experiments to find out how the experiments were empowered.

Findings and discussion

The analysis revealed four different phases with eight key barriers to nurturing and empowering the experiments. For each barrier, a proposition was formulated that can be used for future research and long-term care projects alike. The different phases were labeled according to the nurturing and empowerment processes. The nurturing process was divided into three partial processes, the (1) *planning of the experiments*, the (2) *intended start of the experimentation*, and the (3) *actual start of the experimentation*. The fourth phase was the (4) *empowerment phase*, which reveals the barriers that hindered the empowerment of the experiments. The phases, barriers, and propositions are listed in Table 2.

In the following, the barriers are discussed with not only SNM literature, but also with project management literature in and outside the domain of healthcare. The reason is that SNM is a relatively new theory that has been developed over the past 15–20 years.³¹ Therefore, it only provides limited insights into the planning, implementation, and evaluation (which are both, project management-related processes as well as part of the nurturing and empowering processes) of experiments. It should also be noted that using SNM as a theoretical background to study experiments in healthcare is just at its beginning.³² Hence, our understanding of nurturing and empowering long-term care experiments can be advanced using insights from project management literature.

Table 2: Phases, barriers, literature, and propositions

Phase	Barriers	View		
		Comparison with SNM	Comparison with project management literature in and outside healthcare	Propositions
Nurturing Phase 1: Planning experiments	<i>Barrier 1: Lack of time</i> Managers experienced time pressures resulting in an insufficient planning of the experiments	<ul style="list-style-type: none"> • Need for space and time to experiment^{10,13} 	<ul style="list-style-type: none"> • By not taking the time needed, projects are prone to fail solving actual problems while the quality of healthcare delivery is likely to decline.³⁴ • ‘Top management should spent time reviewing the plans and programs in proportion to the costs and potential [...]’.³⁵ 	To successfully plan experiments, managers need to spent sufficient time to discuss and evaluate the experiment plans.
	<i>Barrier 2: Neglecting context</i> Concept team developed a conceptual plan for the experiments ignoring the institutional context of the actual experiments	<ul style="list-style-type: none"> • ‘Each transition project is unique in terms of context and participants and therefore requires a specific contextual and participatory approach’.¹³ 	<ul style="list-style-type: none"> • Contexts and change processes are very much dependent on each other.³⁷ • Context has to be suitable for the change process.³⁸ 	To successfully plan experiments, conceptual planners have to engage local actors to understand the local institutional context.
	<i>Barrier 3: Lack of engagement</i> Key actors were not engaged leading to a poor planning of the experiments	<ul style="list-style-type: none"> • Context-specific participation is necessary.¹³ 	<ul style="list-style-type: none"> • It is important to engage professionals into change process to include their knowledge and to continuously monitor the change process.³⁷ • Stakeholder engagement during planning phases enable an advanced understanding of possible outcomes, properties, and conditions that would otherwise be overlooked.^{40,41} 	To successfully plan experiments, the key stakeholders (those who are directly affected by the experiments) need to be engaged in the planning process from the beginning to create commitment for the project.
Nurturing Phase 2: Intended experimentation	<i>Barrier 4: Lack of motivation</i> Project managers and professionals were lacking motivation to conduct the experiments.	<ul style="list-style-type: none"> • ‘Motivation’ is one of the key process criteria for successful experimentation.¹⁰ • Motivating does not mean persuading. If an actor or stakeholder is not motivated to experiment, the network should consider leaving those actors out to avoid a slow down or a failure of the project.⁹ 	<ul style="list-style-type: none"> • Motivated employees are needed to achieve change processes.^{34,37} • Motivation is listed among the key performance areas of hospitals.⁴² • Motivation is dependent on other factors as, for example, the lack of time can have a severely negative impact on the motivation of employees.³³ 	To successfully nurture experiments, top managers need to motivate both, internal actors (e.g. professionals) and external actors concerned (e.g. community members).

	<p><i>Barrier 5: Lack of time</i> Project managers and professionals did not receive enough time and attention from top managers to conduct the experiments.</p>	<ul style="list-style-type: none"> • Time pressure can result in poor learning outcomes,¹¹ which could end up in misleading conclusions. 	<ul style="list-style-type: none"> • This lack of time is especially negative for the experimentation, because professionals get into a 'treadmill' meaning that they experience huge work pressures that hinder them to be creative.³³ • Many innovation projects fail to properly estimate the project duration leaving little space and time to experiment.^{33,43} 	<p>To successfully nurture experiments, top managers need to provide enough time for and devote attention to the project managers and professionals. The more time pressure, the less likely that managers and professionals are creative and that second-order learning will take place.</p>
	<p><i>Barrier 6: Lack of support</i> Project managers and professionals did not receive enough support from top managers to conduct the experiments.</p>	<ul style="list-style-type: none"> • SNM outlines the need for external support from governments, users, and other stakeholders to successfully experiment.^{9,11} Thereby, organizations need to be committed and make sure that resources are available to support the niche-innovations.¹⁵ 	<ul style="list-style-type: none"> • Managers have to support and motivate others to advance the change processes. Support is needed, because the involved actors would otherwise resist the change as the new way of working goes against their existing routines.³⁶ • Without the support of the top management, employees lose interest in the project and show little creative thinking.³³ 	<p>To successfully nurture experiments, the experiments should not contradict or be in the way of prioritized organizational strategies. Otherwise, the niche-innovations lack the support needed to actually experiment.</p>
<p>Nurturing Phase 3: Actual experimentation</p>	<p><i>Barrier 7: Sense of urgency</i> Until the monetary pressure of the ministry, there was no sense of urgency for the top managers to conduct the experiments.</p>	<ul style="list-style-type: none"> • Sense of urgency can be intensified by either governments¹¹ or by private organizations.¹² • If there is no pressure, many organizations are driven by current economic success, not sensing the urgency to change by ignoring long-term structural challenges.¹¹ 	<ul style="list-style-type: none"> • The sense of urgency has to be shared by top managers to devote important resources to projects.⁴⁴ • Project managers '[have] to create a sense of urgency to align team members towards completing a common (ambitious but realistic) goal, while at the same time allowing time for crucial reflection processes'.⁴⁵ 	<p>To successfully nurture experiments, the sense of urgency is needed as it results in the motivation of as well as the support and time for the actors involved, without the sense of urgency, no experimentation will take place.</p>

Continued

Table 2: *Continued*

Phase	Barriers	View		
		Comparison with SNM	Comparison with project management literature in and outside healthcare	Propositions
Empowerment Phase 1: Stabilization of experiments	<i>Barrier 8: Lack of commitment</i> As the subsidy ended, the top managers did not show any commitment in the continuation and stabilization of the experiments.	<ul style="list-style-type: none"> Contemporary SNM research does not highlight the importance of commitment to experiments during the empowerment of niche-innovations. One reason for this can be the lack of cases that demonstrate the actual empowerment of experiments in everyday practices.^{9,10,20} Organizational leaders need to be convinced about the innovation in order to push it through the organization irrespective of other people's doubts and remaining uncertainties.¹² 	<ul style="list-style-type: none"> Commitment is needed to succeed with change processes.³⁶ Thereby, project managers can influence the commitment and the continuation of change processes if they show commitment themselves. Commitment includes the willingness to take risks and to change existing practices which at the same time requires a comprehensive understanding of the context and content.³⁹ 	To successfully empower experiment, key actors need to be committed to the content of the niche-innovations. Otherwise, the experiments are prone to fail as subsidies are lifted away.

Nurturing Phase 1 – Planning experiments in 2008 and 2009

Barrier 1: Lack of time

The experiments were planned by external consultants and higher management members of the elderly care organization and the mentally disabled-care organization, while none of the other key actors were engaged such as the project managers or the professionals of the experiments. The consultants and management members of the concept-, consortium-, steering committee-, and business case team are also referred to as higher or top management members as opposed to project managers and professionals. Key actors are all actors that are directly concerned with or affected by the project. The first barrier to planning the experiments was the lack of time of the top management members. The problem was that they had to do it next to their ongoing work activities. A good example is given by manager 1 of the mentally disabled-care organization, who outlines how difficult it was to organize the meetings with all the different managers and consultants. By using the word 'drama', she emphasized the negativity associated with the project meetings.

Your daily work will result in nothing. [The CEO of the mentally disabled-care organization] can say, [Manager 1], you are allowed to work on the project for one day per week. That doesn't work. ... That also has been a drama to get people together. [The secretary] always had to spend a lot of time on it, because it just demanded so much time. And you have to do it next to your work.

As the managers had to do it next to their work, they experienced increasing time pressures to get their job done. The problem was that they got demotivated to plan the experiments. Generally, time is needed to be creative and nurture the experiments.¹³ While it is not known how much time is needed to be creative to come up with niche-innovations, there is evidence that time pressures can result in the frustration of managers.³³ This in turn can lead to a 'postpressure cognitive paralysis', which means that managers are not only frustrated during the meetings, but also the days after the meeting leading to a loss of creativity.³³ Yet, creativity was actually needed to plan the radical long-term care experiments.

Moreover, by not taking the time needed, projects are prone to fail solving actual problems while the quality of healthcare delivery is likely to decline.³⁴ It should be noted that 'top management should

spent time reviewing the plans and programs in proportion to the costs and potential [...]'.³⁵ However, this was not done. Eventually, the time pressure not only frustrated the managers and led to a poor planning of the experiments, but also led to a delay of the experimentation. The time to experiment became shorter and shorter as the planning had to be altered and aligned to the local context, which was initially ignored by the concept team.

Proposition 1: To successfully plan experiments, managers need to spend sufficient time to discuss and evaluate the experiment plans.

Barrier 2: Neglecting institutional context

According to manager 1 of the mentally disabled-care organization, especially the incorporation of consultants was problematic, since they did not know much about the local healthcare delivery processes:

I think that in the first year in which we had meetings with the project development group, the network firm and the research institute, that we had a lot of meetings. But especially with people that did not really know what it is actually about. And that was very time consuming. [...] we have been gathering together a lot, talked about care while it was lost time in retrospect. [...] with the research institute, researchers were sitting at the table. And they really come from another planet compared to us. They should just have joined at a later point [of the experiments]. They can have great contributions, but not at the time of [planning the experiments]. We have lost a lot of time until the moment that we said: 'What are we actually doing over here?'. We have to stop with this, because everyone was reluctant to go to [the meetings].

In general, each individual niche-innovation project is dealing with a specific context which 'requires a contextual and participatory approach'.¹³ By this means, local actors have to participate in the nurturing process to be able to encounter context-specific information into the planning process. This is in accordance with van Raak *et al.*, who emphasized the importance of considering the institutional context during change processes. In their case, the institutional context (defined by 'external factors' and the 'local situation') hindered the change processes.³⁶ Here, the specific local context was ignored by focusing too much on the conceptual idea instead of the actual experiments. This was revealed by consultant 3 of the project development group:

[The conceptual idea] was not communicated very well. That is probably related to the fact that I do not speak the [professional] language. [We] continued with the conceptual thinking for too long.

Contexts and change processes are very much dependent on each other.^{13,37} As such, the context has to be suitable for the change process.³⁸ Hence, the context needs to be evaluated before starting the change process. In the underlying case, the general context seemed to be suitable to experiment with radical healthcare innovations. But the concept team did not compare its assumptions with the actual local situation. The problem is that the local context can diverge from the assumptions so that important aspects are neglected. To avoid this from happening, especially those actors embedded in the local context should be engaged to plan the experiments.

Proposition 2: To successfully plan experiments, conceptual planners have to engage local actors to understand the local institutional context.

Barrier 3: Lack of engagement

The actors that were directly affected by the experiments (e.g. project managers, professionals, community members) were not engaged in the planning. Only by September 2009, the first project managers and the professionals got engaged to start the experimentation. Yet, the content was not sufficiently communicated to them. This led to a delay of the actual experimentation for several months so that nothing happened before 2010. Project manager 1's response to the question *who planned the experiment* was:

It came from the [concept]-team. I did not know anything about the project till the moment that they passed it on to me. [...] I didn't really understand it completely. [...] it wasn't communicated to me satisfactorily. [...] But maybe I haven't picked it up properly." Later in the interview she emphasized the lack of communication with the consultant: "[...] I had a chat with [a consultant from the research institute]. The role of [the consultant] has been quite ambiguous to me for a while. [The consultant] is working for [the research institute] and is purely supporting us. But [the consultant] is not the driver of this [experiment]. Yet that is what I thought, but it seems like I have to be the driver.

The lack of engagement was also evident in the other experiments. For instance, the project manager of experiment 2 had no problems to get

acquainted with the experiment despite the fact that he was not engaged during the planning. The general idea was communicated well and fitted into his daily working practices. However, the experimentation did not start in 2009 and failed to do so until July 2010. The biggest problem was not engaging the community members. The project manager said during a meeting:

We should have involved the [community members] from the beginning. We lost quite some time to first understand what was going on and second, to convince the [community members] to cooperate and participate in the [experiment].

The project manager further explained that the community was divided into many different groups with various stakeholders. He was unsure if it is the right community to start such an experiment. In experiment 3, regional director 2 was not engaged even though the experiment took place in her region. This lack of engagement resulted in the lack of support for the project manager to experiment. Project manager 3 outlined her difficult situation:

[...] my director has not really received the idea of the [...] program and the content of the project so that I do not have the space that I would need. In general, the professionals will not start to do crazy things. They just want to change little and valuable things which is for the benefit of everyone. [...]

So far, previous literature on niche-innovations emphasizes that social networks have to be formed and that expectations have to be managed,¹⁵ but it fails to highlight the significance of strategically planning the experiments. Although Loorbach and Rotmans¹³ stress that context-specific participation is necessary, they do not disclose how and who to engage into a niche-innovation project. Here, SNM can learn from the methods of stakeholder engagement. Gable and Shireman³⁹ point out that many organizations fail to engage key actors at the beginning of a project through false or even no planning at all. Then, throughout the project they learn from it and try to correct the course of action by informally engaging key actors as seen in the underlying experiments (e.g. lack of engaging the project manager and the professionals in experiment 1, the community stakeholders in experiment 2, or the regional director in experiment 3). This can be avoided by engaging the key actors during the planning phase. Previous research also highlights that

stakeholder engagement during planning phases enable an advanced understanding of possible outcomes, properties, and conditions that would otherwise be overlooked.^{40,41} Thereby, projects are able to 'build trust' and reach 'consensus on the organization's future'.³⁸

More specifically, Tataw³⁷ outlines the importance of engaging professionals into change process: 'upfront and open discussion of change with health professionals addressing fear issues such as loss of professional autonomy and economic harm [as well as the] involvement of frontline health professionals in the planning, implementation, and constant review of the change process' is needed to successfully experiment with niche-innovations and to change existing institutional practices.

Without engaging the professionals, the change process will fail. Thereby, the engagement of professionals in the planning, implementation, and evaluation of change processes should depend on if they are directly or indirectly affected by the experiments.³⁸ If they are indirectly affected, their engagement can be seen as an additional workload that hinders the experimentation rather than enhancing it.³⁸ Thus, only those professionals who are directly affected should be engaged throughout the planning process. This also helps to avoid engaging too many people so that the process is not slowed down. Here, however, the professionals, the community stakeholders as well as regional director 2 were directly affected and therefore should have been engaged in the planning of the experiments.

Proposition 3: To successfully plan experiments, the key stakeholders (those who are directly affected by the experiments) need to be engaged in the planning process from the beginning to create commitment for the project.

Nurturing Phase 2 – The intended start of the experimentation in 2009

Barrier 4: Lack of motivation

Due to the barriers during the planning phase, other barriers arose during the intended start of the experimentation such that the nurturing process stagnated. One of the barriers that hindered the intended start of the experimentation was the lack of motivation which was evident in experiments 1 and 2. Previous research has already highlighted that motivation can drive the nurturing processes.^{11,12} Thereby, motivation is dependent on other factors as, for example, the lack of time can have a severely negative impact on the motivation of employees.³³ According to Young and Ballarin³⁴ motivation is 'a process that helps to generate a commitment to work towards achieving superior

performance, and that rewards employees for behavior that is in the organization's best interest'. Here, the network's interest was to nurture the experiments to change long-term care practices. Yet, the project manager of experiment 1 described how difficult it was to sustain committed to the project and simultaneously motivate others to it:

A problem is to ensure the continuation of the project and to motivate the people to continue. That is a huge problem. [...]. Hence, I think nothing really happens and that is really sad. Sometimes I find it really troublesome.

In the beginning, the client portal did not work due to software problems. By the time the problems were fixed, new problems arose such as limited functionality. For example, the only thing clients were able to do was writing messages to nurses and family. Other problems included very long start-up times or that the font size of the client portal layout was too small for the elderly to read.

In experiment 2, the lack of engagement during the planning phase created a certain level of ambiguity about the roles of the various stakeholders and the content of the experiment which disabled the experimentation for 10 months. In the evaluation report, the community's lack of motivation is described as follows:

In the beginning there was not enough drive within the community to collaborate among the [community center], the municipality, the community board, and the welfare organization. There is a lack of communication about the [experiment] and uncertainty persists about who is doing what.

Generally, it is known that motivated employees are needed to achieve change processes.^{34,37} The importance of motivation is also highlighted by Trotta *et al.*,⁴² who listed it among the key performance areas of hospitals as well as by van den Bosch,¹⁰ who listed 'motivation' as one of the key process criteria for successful experimentation.

Here, the level of motivation is extend as described by Young and Ballarin. Instead of limiting it to the motivation of employees within the health-care organizations, other external actors, such as the community members in experiment 2, also need to be motivated to commit and participate in the community care development. However, there are certain limits that a niche network has to consider. Motivating does not mean persuading. If an actor or stakeholder is not motivated before or during

the experimentation, the network should consider leaving those actors out to avoid a slow down or a failure of the project.⁹

Proposition 4: To successfully nurture experiments, top managers need to motivate both, internal actors (e.g. professionals) and external actors concerned (e.g. community members).

Barrier 5: Lack of time

Similar to the planning of the experiments, there was a lack of time to nurture the experiments 1 and 2. The managers and professionals had to do it next to their ongoing work activities. This was especially highlighted by professional 1 of the elderly care organization:

[...] if, at a certain moment space is given in terms of time [to experiment], but I will not be replaced, then my work will just continue. Hence, on the days I come back, I will experience a greater workload, because you can only spread it over three days [instead of five].

This is especially problematic, because professional 1 did not experience that the experiment was important to the organization. Amabile *et al.*³³ emphasize that creative thinking is unlikely if the importance of the project is not well communicated while the time pressure to get the work done is high. Thereby, time pressure can result in poor learning outcomes¹¹ which could end up in misleading conclusions. In the underlying case, the network failed to acknowledge the importance of providing the time and space to experiment. This was argued by consultant 4 of the research institute:

And another problem that played a role [...] I think is that [the elderly care organization] did not [...] provide enough time [in a way] that people can really have the time to do this. It all had to be done [next to the daily work]. And that's how it works in practice, I can imagine it. [...] Maybe, if there had been more time to think about it, and to call people that want to talk about it [that more would have been achieved]. This kind of initiatives were missing.

This lack of time is especially negative for the experimentation with niche-innovations, because professionals get into a 'treadmill' meaning that they experience huge work pressures that hinder them to be creative.³³ Yet, creativity is needed to nurture experiments.¹³ This could be one of the reasons why many experiments fail as employees have to do it next to their work, not being able to become

creative. This is linked to a more general problem, as many innovation projects fail to properly estimate the project duration leaving little space and time to experiment.³³ But how much time is actually needed to nurture experiments? And are there only negative effects associated with time pressure?

According to Rycroft and Kash⁴³ 'time pressures reinforce the path dependence of local learning'. Hence, if the participants are under time pressure, it will result in local learning which would have been a desirable outcome in the underlying case. In SNM, this is called first-order learning.^{11,15} However, this will become a disadvantage when the experiments have to be empowered, because it requires learning beyond the local context. This is called second-order learning, which means learning about how the lessons learned in the experiments could be translated to general rules and policies.¹⁵

Future projects will have to find the right balance between creating enough time and not too much time to nurture the experiments to allow for focused and reinforced local learning. Once experiments get closer to the empowerment, more time is needed for learning outside the local context. So far, time management during the experimentation has been neglected in SNM. The results demonstrate that it needs more attention in the future to improve the nurturing process.

Proposition 5: To successfully nurture experiments, top managers need to provide enough time for and devote attention to the project managers and professionals. The more time pressure, the less likely that project managers and professionals are creative and that second-order learning will take place.

Barrier 6: Lack of support

The lack of support was especially evident in experiments 1 and 3. In experiment 1, neither an IT consultant was engaged during the planning nor was there enough support from the assigned IT consultant during the intended start of the experimentation. This resulted in many technical limitations of the client portal, which hindered its proper usage. In experiment 3, there was neither support from the regional director even though she was responsible for the nursing home. The project manager of experiment 3 outlined that even the few professionals who tried to do be innovative were 'called off':

[Being innovative] is a competence we would like our professionals to have. However, if you are adventurous you will be called off. Hence, we say that we want it, but we actually do not really want it, because it is awkward and inconvenient.

This outcome of experiment 3 is supported by van den Bosch¹⁰, who highlights in one of her studies that one barrier was that professionals felt insufficient support and trust from, and communication with, the top management. Notwithstanding, the results here are equivocal. In experiment 1, the professionals were very much trusted with their nurturing processes. Nevertheless, they were indirectly lacking managerial support as no additional resources in terms of technical support were granted to get the problems with the client portal fixed.

The results coincide with Van Raak *et al.*,³⁶ who argue that managers have to support and motivate others to advance the change processes. They pointed out that support is needed, because the involved actors would otherwise resist the change as the new way of working goes against their existing routines. In experiment 1, however, the problem was that some professionals were interested in the experiments, but the lack of support was a barrier to nurture the experiments. Without the support of the higher level management, employees lose interest in the project and show little creative thinking.³³ It can be concluded that the professionals were hindered to be creative owing to the lack of managerial support.

More generally, SNM outlines the need for external support from governments, users, and other stakeholders to successfully nurture experiments.^{9,11,13} Thereby, organizations need to be committed and make sure that resources are available to support the nurturing of the experiments.^{13,15} But how is this actually done? Research in healthcare shows that healthcare organizations can choose diverging strategies depending on their visions. Therefore, they need to coordinate their support activities and resources according to their strategic vision.^{34,37,38} In the underlying case, the experiments were not seen as organizational priorities as, for instance, the client portal in experiment 1 was merely an add up to the electronic client dossier. The resources necessary were not available to actually experiment with the client portal. Therefore, the following proposition is formulated:

Proposition 6: To successfully nurture experiments, the niche-innovations should not contradict or be in the way of prioritized organizational strategies. Otherwise, the niche-innovations lack the support needed to actually experiment.

Nurturing Phase 3 – Actual start of the experimentation in 2010

Barrier 7: Sense of urgency

Since the network failed to start the experiments, the transition program was threatening to take

away the subsidy. The pressure was growing, because they had doubts about the realization of the experiments throughout 2010. The situation stayed unchanged although the network submitted detailed information about the current state of affairs of the experiments as well as an updated planning of the implementation. The network failed to create the sense of urgency to experiment. The meeting minutes of the first steering committee meeting in 2010 reads as follows:

Last Wednesday, we [...] received a report [from the program-team of the ministry which indicated] that they were not satisfied, and that their doubts have not vanished despite the information about the current state of affairs.

As a consequence, the steering committee created a sense of urgency to successfully start the experiments. The experiments were pushed by organizing more meetings and discussions with the key actors. Foremost, they tried to motivate others to participate as well as creating space and providing support to the professionals. Eventually, members of the steering committee presented the progress of the experiments to the transition program of the ministry. By June 2010, the transition program was convinced about the project and assured the funding till the end of 2010.

Looking at the SNM literature, it can be seen that the sense of urgency is needed to nurture experiments.^{9,11,12} The sense of urgency can result from environmental pressures⁹ such as an aging population. Thereby, the sense of urgency can be intensified by either governments¹¹ or by private organizations¹². If there is no pressure, many organizations are driven by current economic success, not sensing the urgency to change by ignoring long-term structural challenges.¹¹ Similarly, the underlying experiments were only nurtured when the government pressured the steering committee which created the sense of urgency. Before, the existing practices were prioritized by the healthcare organizations.

According to the project management literature, the sense of urgency has to be created by top managers and project managers to devote the necessary resources to the project.^{44,45} Without the sense of urgency, projects are likely to fail.⁴⁴ Thereby, project managers have to be careful to balance the sense of urgency to realize the project and the time and space to reflect on the project processes to properly realize the project.⁴⁵ If, for instance, the sense of urgency is too strong so that the project manager rushes through the nurturing

processes (e.g. building a social network or learning from the experiments) without reflecting on the other actors' perspectives, the experiments will not succeed as seen in the underlying project. In the following, it is shown how the sense of urgency, enabled through monetary pressure, provided motivation and time and support to actually experiment.

The active engagement of relevant actors created enough motivation, time, and support to nurture the experiments. As Amabile *et al.*³³ emphasized, the sense of urgency creates a feeling of importance and encouragement and thus leads to employees being creative. Project manager 1 said for instance:

[...] we had a [first] meeting with all project managers of all projects. I have to say that this really helped me [meaning] that I am not the only one.

Also the professionals and the community stakeholders felt the sense of urgency and slowly got more excited about the experiment creating a certain drive to experiment. Suddenly, managers and professionals took the time to experiment. Project manager 1 emphasized:

I think it is a nice project. Hence, I am basically working on it every day. Either in my mind, via mails, or right now I am working on a quarterly report for my director. Then the subject automatically comes to the forefront, then I am again busy with the transition program. Thus, it is something that I continuously pay attention to.

Moreover, managers and professionals finally received the support needed. The project manager requested the help of a new IT consultant. She pointed out:

“Only on the last minute the [IT consultant] joined the project-team.” Later on she argued that the “IT [consultants] should have done everything to [set up the client portal], then it maybe would have started in a better way.”

Eventually, the rising pressure from the transition program forced the project manager 2 to engage community workers in order to establish the experiment more vigorously within the community (building a social network) by discussing and sharing their goal with the key members of the community (managing expectations). At that point, the innovation director directly joined the project to support the project manager and create a sense of urgency. The project manager 2 pointed out:

The talks with the different stakeholders actually continued till [the innovation director] was ringing the bell and said that according to him the community does not really proceed. Back then [the innovation director] got into the struggle as a big fish [saying that] ‘now we are going to sit at the table with the stakeholders. Now we are finding out if a declaration of intent is actually [possible and if] we will support it all together’. Then it worked out.

Experiment 3 was also receiving the support needed eventually. As the pressure from the program-team was mounting, the experiment had to be pushed. Discussions between the innovation director, the project manager, and the regional director clarified the intentions of the experiment so that the regional director got more engaged throughout 2010. The innovation director tried to explain the problematic situation in experiment 3:

A huge problem is that [this project aims at] essential changes [of healthcare delivery practices]. [...] the professionals get more freedom and space which means that the [director] has to let go. This is solved now, but it took quite some time to get there. [...]

Interestingly, the time available to nurture the experiments did not change. But the attitude towards the experiments and the importance changed. This is what Amabile *et al.*³³ call the ‘protected creativity time’ meaning that the project managers and professionals believe that the experiments are important, creating a certain focus on the niche-innovations while protecting it from the everyday practices. This is basically the idea how it should be done in SNM. Niches are protected spaces.^{11,15} Therefore, the protection has to include the time professionals spent experimenting. Eventually, the network developed a vision on future healthcare delivery practices (e.g. Fig. 2⁴⁶).

Proposition 7: To successfully nurture experiments, the sense of urgency is needed as it results in the motivation of as well as the support and time for the actors involved, without the sense of urgency, no experimentation will take place.

Empowerment Phase – Stabilization of experiments in 2011

Barrier 8: Lack of commitment

At the beginning of 2011, the funding by the government stopped. In May 2011, during the focus group it seemed as if the commitment was there to

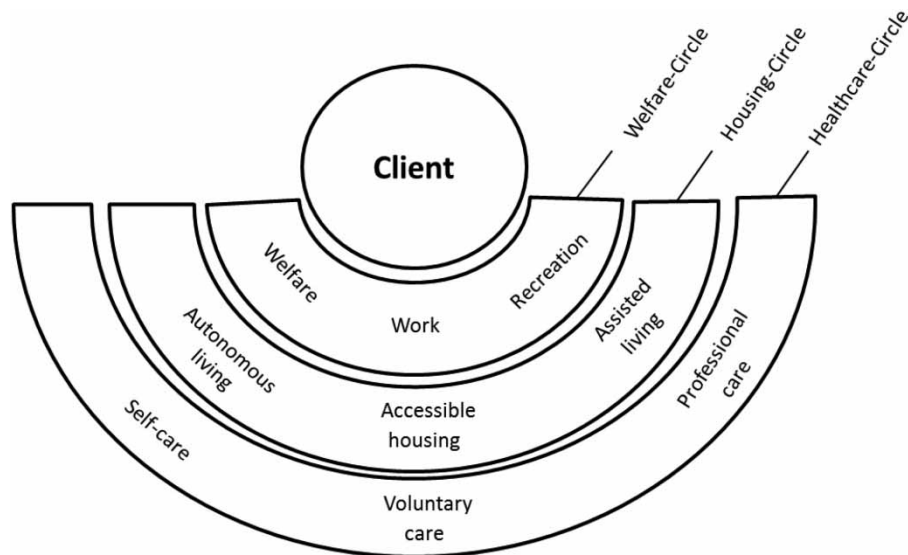


Figure 2. Vision on long-term care.⁴⁶

empower the experiments. However, actually maintaining the experiments during everyday practices has eventually failed by September 2011. In experiment 1, the main reasons were the technical limitations and other priorities such as the electronic client dossier that has been developed. This dossier in turn was linked to the client portals' implementation throughout the whole organization which is going to take much more time than expected. The project manager outlined:

[The client portal] is part of our long-term care plan which states that the client portal is requested and needs to be implemented in a certain timeframe.

Nevertheless, the matter has not been urgent enough to be a highly prioritized target by the elderly care organization. In 2011, nobody has picked up the experiments to spread the lessons learnt across the organization. Likewise, experiment 2 was lacking commitment, particularly from the community. Nobody was willing to take the lead while all of them wanted to be part of the community. According to the majority of the key stakeholders, the volunteers of the community should have taken over the leadership role. However, the biggest problem was to find committed daily board members for the community center that trigger the community to continue innovating. Project manager 2 said:

After ending the project we met up with the municipality, the housing association, the welfare organization, the board members of the community center, and the chairman of the community to talk about; what has to be done in order to actually roll out

and extend [the community's revitalization]? And then we actually quite quickly decided that if we want to develop something over there that it has to start with the daily board members of the [community center]. [...] we have jointly concluded that the current daily board members [...] failed to develop a vision that extends the current activities. [Even worse,] some daily board members of the community center stopped so that there are not enough people. [In order to find adequate daily board members] they tried to announce vacancies in the community paper, but there is no reaction on it.

The former project manager was confident that they are going to find adequate board members who are committed to the community, but that this is going to take time. Experiment 3 has also not been able to empower itself into the daily practices even though there was commitment and enthusiasm at the end of 2010. Back then, the regional director finally supported the actions to change the long-term care practices:

We definitely want to continue with [the experiment]. But the guaranty lies, of course, low in the organization. There is [the place] where it has to happen. Hence, it is not the director who can make it. But I can create the conditions. [...]

During the focus group, project manager 3 was also very confident about the empowerment of the experiments. However, this changed during 2011. It seemed that neither the regional director nor the board provided the conditions to empower the experiments in order to change the long-term care

practices. In September 2011, the project manager pointed out that there was a lack of commitment and support from the elderly care organization:

[...] as long as the board does not encounter [the lessons learnt] in the organizational [operations], and [as long as it does] not transfer responsibilities towards the [professionals], then nobody is going to pick it up. [...] It is very difficult [for professionals to change long-term care practices] while being swayed by the issues of the day, [not having the support of the organization].

By the time the subsidy stopped, the sense of urgency and the commitment from key actors slowly vanished. Participants of experiments 1 and 2 argued that time was needed before the experiments empower. However, it is questionable if the outcomes have been sufficient enough for immediate exploitation or if the incentives to continue with the experiments have not been lucrative enough. It is clear that the created sense of urgency by the transition program was not sustainable throughout 2011.

Contemporary SNM research does not highlight the importance of commitment to experiments during the empowerment of niche-innovations. One reason for this can be the lack of cases that demonstrate the actual empowerment of experiments in everyday practices.^{9,10,20} Organizational leaders need to be convinced about the innovation in order to push it through the organization irrespective of other people's doubts and remaining uncertainties.¹² Particularly, during the empowerment, committed leaders are needed who are determined and have the legitimacy to change and spread the sense of urgency to encourage the development of the niche-innovations. Commitment includes the willingness to take risks and to change existing practices, which at the same time requires a comprehensive understanding of the context and content.³⁹

Equally, Van Raak *et al.*³⁶ point out the importance of commitment to succeed with change processes. Thereby, project managers can influence the commitment and the continuation of change processes if they show commitment themselves. Contrary to van Raak *et al.* case, the commitment was not lacking at the start of the change process, but once the subsidy was lifted away and the network was on its own. Hence, it is questionable if the healthcare organizations were really committed to the niche-innovation project. It seemed that the incentive was mainly driven by the

subsidy rather than the content. In the end, the barriers to nurture the experiments first slowed down the experimentation and eventually hindered their empowerment.

Proposition 8: To successfully empower experiments, key actors need to be committed to the content of the niche-innovations. Otherwise, the experiments are prone to fail as subsidies are lifted away.

Conclusion

Implications for practice

The close participation of the first author in combination with the semi-structured interviews enabled the researchers to get deep insights into the barriers to nurturing and empowering long-term care experiments. This study provides valuable lessons to advance both, the nurturing and empowerment of long-term care experiments and SNM literature. First of all, the project has shown how difficult it is to nurture and empower experiments that aim at changing long-term care practices. The problems started during the planning of the experiments. Here, managers were lacking time and consultants were neglecting the institutional context while the actual actors concerned such as the project managers, professionals, and community stakeholders were not engaged. To enhance the nurturing of experiments in future niche-innovation projects, the local context has to be considered while planning the experiments. This requires the engagement of project managers, professionals, and other actors concerned so that the planning includes the knowledge of the local context.

This has to be followed by nurturing the experiments in a way that a sense of urgency is created. Higher management actors have to encourage project managers and professionals to experiment by highlighting the importance of the nurturing process to the organization. Thereby, professionals have to be protected from everyday practices, since they need enough time and space to be creative so they actually drive the nurturing process forward. Here, projects can learn from Amabile *et al.*³³ who emphasize the importance of time and space to be creative and to come up with innovative ideas, which is the essential core of SNM. Failing to do so can result in the lack of motivation, time, and support, which will hinder the continuation of the nurturing process as seen in the underlying case.

It is also crucial that the sense of urgency is not solely generated from the outside (e.g. transition program). The sense of urgency has to be

intrinsically driven, from within the healthcare organizations. Hoogma⁴⁷ already argued that experiments most likely succeed if the interests of the actors' are not purely financial. Otherwise, any nurturing and empowerment processes are destined to fail as the commitment and sense of urgency will vanish as soon as the subsidy stops. Consequently, commitment is particularly needed when the subsidy is lifted away which in turn requires the empowerment of the experiments.

Implications for SNM and further research

Contemporary SNM literature fails to incorporate strategic planning processes in experiments. In particular, methods of stakeholder engagement are missing. This includes extended discussions about the communication of roles and responsibilities of key stakeholders, the need for a balance between a sense of urgency and time to experiment, and the need for commitment during the nurturing and empowerment process. Although the long-term care experiments have provided first insights into these discussions, future research should elaborate on the link between the nurturing and empowerment processes of experiments, and the strategic planning processes as well as the methods of stakeholder engagement. In so doing, it might be interesting to also learn from strategic process management which is in a quest to get further insights into ex-ante and ex-post decision-making behavior of individuals in processes.⁴⁸

Creativity in nurturing and empowerment processes can be another field of interest for SNM, because niche-innovations require creative thinking. Actors need the time and space to play with concepts and ideas that result in innovative practices that did not exist before.³³ Niche-innovation projects might be able to adapt the nurturing processes if our understanding of how creative thinking is triggered in experiments is improved. Future research should elaborate on this.

Finally, the shielding processes need to be scrutinized in future research. The shielding of niche-innovation projects has to be improved, ensuring that healthcare organizations not primarily join for monetary incentives. One idea is to have co-financed subsidies or purely regulative shielding in order to protect those organizations that have created both, a sense of urgency and commitment. This could have positive effects on the nurturing and empowerment processes as the commitment is not entirely driven by the subsidy. Future research has to find out if, for example, co-financed subsidies enhance the nurturing and empowerment processes.

Limitations

There are several limitations of this study. Foremost, the results are based on a single, longitudinal case study. Hence, it is impossible to make bold generalizations regarding the barriers to nurturing and empowerment of experiments. Each barrier was particularly crucial in a specific phase, but not in other ones (except for the lack of time). Future research has to find out if this is true in other projects as well or if a certain barrier arises in multiple phases. Nonetheless, the results here provide some first insights that might be helpful to avoid making the same mistakes in future projects.

Another limitation is the possibility of an observer bias of the first two authors who might have misinterpreted the observations.⁴⁹ To control this it was checked for inter-observer reliability⁴⁹ between the first and second author. Furthermore, a respondent bias might have occurred due to the presence of the researchers in the experiments.⁴⁹ However, according to Sekaran, this is particularly evident in the very early phases of projects and during short projects while the participants get used to the researchers in long-term observations.

Furthermore, the perspective of the client was not incorporated. It would be interesting to find out in how far they were affected by the barriers to nurturing and empowering the experiments and how they perceived the end of the project. More research is needed to answer these questions. Generally, more research is needed to validate these outcomes and to advance the theoretical insights in SNM. Especially, the empowerment processes have to be scrutinized. It seems rather likely that more barriers will arise during the empowerment processes if the top management is committed to the experiments. Thus, future research has to study the nurturing and empowerment processes in other projects.

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Appendix: Primary & Secondary Data

Table A1: Semi-structured interviews 2010/2011

#	Interviewee	Date of interview
1	Innovation director of the elderly care organization	27 April 2010
2	CEO mentally disabled-care organization	19 March 2010
3	Consultant 1 Project Development Group	3 May 2010
4	Consultant 2 Project Development Group	12 April 2010
5	Consultant 2 Research Institute	11 May 2010
6	Project Manager 1 elderly care organization	3 May 2010
7	Project Manager 3 elderly care organization	7 April 2010
8	Manager 1 mentally disabled-care organization	31 May 2010
9	Manager 2 mentally disabled-care organization	31 May 2010
10	Consultant 4 Research Institute	20 April 2010
11	Consultant 3 Project Development Group	15 September 2011
12	Project Manager 1 elderly care organization	29 September 2011
13	Project Manager 3 elderly care organization	20 September 2011
14	Project Manager 2 elderly care organization	5 October 2011

Table A2: Focus group (31 May 2011) Discussion, evaluation, and validation of the project outcomes and the research findings

#	Participants	Role of interviewee
1	Innovation director of the elderly care organization	Head of the Steering committee and consortium team
2	Consultant 3 Project Development Group	Overall project manager
3	Consultant 2 Project Development Group	Consortium team member
4	Project Manager 3 elderly care organization	Project Manager of experiment 3
5	Manager 1 mentally disabled-care organization	Concept team member and experiment 3 member
6	Manager 2 mentally disabled-care organization	Business case team member
7	Professional 1 elderly care organization	Experiment 1 member
8	Professional 2 elderly care organization	Experiment 1 member
9	Consultant 3 of the program-team (Ministry)	Steering committee member and consortium team member

Table A3: Key documents

#	Documents	Information	Date of document
1	Project plan	Outline of the overall project	February 2008
2	Experiment plan	First outline about the content of the experiments	February 2008
3	Experiment 1 – plan	Outline of experiment 1	August 2009
4	Experiment 2 – plan	Outline of experiment 2	August 2009
5	Experiment 3 – plan	Outline of experiment 3	January 2010
6	Evaluation Report 1	Evaluation of experiment 1	December 2010
7	Evaluation Report 2	Evaluation of experiment 2	December 2010
8	Evaluation Report 3	Evaluation of experiment 3	December 2010
9	Evaluation Report 4	Evaluation of the whole project	January 2011

Table A4: Participation in meetings

#	Meetings	Information	Date of meeting
1	Steering committee meeting 1	Discussions on the progress of the project; presentation of experiment 3 by project manager 3	23 March 2010
2	Steering committee meeting 2	Discussions on the progress of the project; presentation of experiment 1 by professional 1	25 May 2010
3	Steering committee meeting 3	Discussions on the progress of the project; presentation of experiment 2 by project manager 2	31 August 2010
4	Steering committee meeting 4	Discussions on the preliminary evaluation reports of the project	31 August 2011
5	Steering committee meeting 5	Closing of the project	31 March 2011
6	Consortium team meeting 1	Discussions on the progress of the project as well as the doubts of the transition program	2 February 2010
7	Consortium team meeting 2	Discussion of the business model that should be based on the experiments	29 April 2010
8	Consortium team meeting 3	Discussions on the progress of the project; information about a meeting that took place between a delegation of the project (four steering committee members and one consortium team member) and the transition program	5 May 2010
9	Consortium team meeting 4	Discussions on the progress of the project; positive feedback from the transition program	15 June 2010
10	Consortium team meeting 5	Discussions on the progress of the project; further discussion of the business model that should be based on the experiments	14 September 2010
11	Consortium team meeting 6	Discussions on the progress of the project; further discussion on how to learn from the experiments	10 October 2010
12	Consortium team meeting 7	Discussions on the progress of the project; preparation for the evaluation reports	23 November 2010
13	Consortium team meeting 8	Discussions on the ending of the project; further preparation and discussion for the evaluation reports	21 December 2010

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