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## Featured Article

## Exploring stakeholders' perspectives on the adaptation of the Living Lab approach to dementia care: A qualitative study



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## ABSTRACT

Collaborative research can promote knowledge translation and help to link care practice and research. Academic-practice partnerships enable joint research projects in collaboration between care professionals, researchers, patients, and other stakeholders. This qualitative study was conducted during the adaptation phase of the *Living Lab Dementia*, an academic-practice partnership for collaborative research on long-term dementia care. The aim was to explore stakeholders' perspectives on linking care practice and research in a sustainable, research-focused partnership. Data were collected in fifteen qualitative interviews with representatives from three stakeholder groups: nursing care professionals, people with dementia, and nursing researchers. Thematic Framework Analysis resulted in five themes: (1) Access, (2) Expectations, (3) Shaping the collaboration, (4) Linking Pins, and (5) Participation. The findings suggest that care professionals expect support in implementing research results into practice. Researchers should take the lead in shaping the collaboration and create opportunities for stakeholders to get involved.

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## Background

Linking practice and research poses an ongoing challenge for health science. The adoption of research in care practice is slow,<sup>1</sup> and a barrier frequently described as *evidence-practice-gap* or *know-do-gap* hinders the implementation of research.<sup>2,3</sup> In nursing in particular, practice and research are traditionally considered separate areas of work; nursing positions combining practice and research duties are rare,<sup>4</sup> which reinforces the separation of practice and academia in terms of staff.

*Knowledge translation* sums up several strategies aiming to bridge the gap between practice and academia. While early models depict knowledge translation as a linear process moving knowledge from producers to users, recent conceptualisations highlight its complexity and call for models acknowledging its dynamic nature.<sup>5</sup> Knowledge translation approaches characterised by a unidirectional or passive flow of information are increasingly considered less suitable for

bridging the evidence-practice-gap than those focusing on reciprocity and exchange.<sup>3,6</sup> One way to benefit from exchange and to use knowledge translation interactively is to conduct joint research projects in collaboration between practitioners, researchers, and other stakeholders - sometimes referred to as 'co-production of knowledge'.<sup>7</sup> Engaging in this process can ensure that the needs of all stakeholders are met<sup>8</sup> and that the outcomes are relevant and useful to care practice.<sup>7</sup>

Academic-practice partnerships take on an important role in this regard, as they encourage knowledge sharing and joint research,<sup>9</sup> and promote the implementation of evidence-based interventions into clinical settings.<sup>10</sup> Partnerships have been employed to pursue different goals via collaboration between academia and practice, e.g. staff education,<sup>11</sup> organisational development,<sup>12</sup> improvement in quality of care<sup>13</sup> or development of nursing research capacity.<sup>14</sup> Finally, they may serve to answer the long-standing demand for enhanced collaboration between clinical and academic nursing.<sup>15</sup> While partnerships offer considerable potential, academic-practice collaboration poses many challenges, e.g. staff turnover, recruitment of individuals, or development of interpersonal relationships, the latter constituting a core element of academic-practice partnerships.<sup>16</sup>

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In order to address the evidence-practice-gap in dementia care, the multi-centre research project PraWiDem (German acronym for *linking professional nursing practice and research in dementia*) aims to implement an academic-practice partnership in long-term dementia care in Germany, based on the Living Lab approach. The 'Living Lab in Ageing and Long-Term Care' is a network of care organisations, scientific and educational institutions developed at the University of Maastricht (Netherlands). Within the Living Lab, researchers and healthcare professionals conduct joint research on long-term care with older people and their relatives to integrate research into this care setting.<sup>17</sup> Its structural elements include interdisciplinary collaboration, as well as the so-called *Linking Pins*: Linking Pins are practice-based or scientific representatives, who work together as pairs with their respective counterparts to stimulate and conduct practice-oriented research, and enhance the integration of research into practice.<sup>17</sup> Following the adaptation of the Living Lab approach, the 'Living Lab Dementia' will be implemented and evaluated in two German regions. Three universities and three long-term care organisations have joined forces to reach this shared goal.

This current paper reports findings from a qualitative study conducted during the adaptation of the Living Lab approach, guided by the MRC framework for complex interventions.<sup>18</sup> According to the MRC framework, stakeholders should be involved in every research phase. If the implementation particularly depends on their commitment to the intervention, they should help to actively shape the intervention.<sup>19</sup> We therefore sought to explore stakeholders' perspectives on the implementation of a Living Lab in Germany. Alongside results from a literature review on approaches for mutual exchange between professional nursing practice and research,<sup>20</sup> their statements were used to guide the implementation of the Living Lab Dementia.

## Objective

This study aimed to map preconditions for a research partnership between nursing practice and research, and to investigate the conditions for successful collaboration. As participation of people with dementia and their relatives is both a central tenet and an objective for Living Lab collaboration, preconditions for their successful participation in the Living Lab Dementia should additionally be investigated.

## Methods

This study adopted a qualitative design to explore stakeholders' perspectives in focus groups and individual interviews. Data were analysed using a Thematic Framework Analysis. The study design and reporting adhere to the consolidated criteria for reporting qualitative research (COREQ).<sup>21</sup> The ethics committee of the Medical Faculty at Martin-Luther-University Halle-Wittenberg approved the study protocol.

### Group composition and sampling

Based on previous experiences with academic-practice partnerships,<sup>22,23</sup> we identified three relevant stakeholder groups: nursing care professionals (1), people with dementia and their relatives (2), and care and nursing researchers (3). In order to include a wide range of opinions and achieve homogeneous groups, which are conducive to discussions,<sup>24</sup> we aimed at forming three focus groups per stakeholder group, each composed of participants with similar occupational and educational backgrounds. Participants were recruited from collaborating care organisations, the German Alzheimer Association, a local dementia support group, the project advisory board, and through individual contacts.

In view of the ongoing SARS-CoV-2-pandemic, we planned to conduct virtual focus groups with a reduced group size of three to four participants.<sup>25</sup> Participants received written and oral information upon contact (convenience sample). If participants could not join the focus groups, we planned to conduct semi-structured individual interviews. Written informed consent was obtained from all participants.

### Data collection

Semi-structured interview guidelines focusing on potential requirements, facilitators, and barriers of academic-practice collaboration were developed for the focus groups and individual interviews, and adapted to the respective target groups (Appendix A). The guidelines for people with dementia and informal carers focused on dementia care and general barriers and facilitators for participation. A dementia representative from the German Alzheimer Association [HSS] assisted in developing these guidelines, reviewed questions for appropriateness, and moderated the focus group with people with dementia. Two trained researchers conducted the other focus groups and interviews with one serving as moderator and the other taking field notes. All focus groups were conducted virtually via a videoconferencing service. Discussions were audio recorded after receiving consent from all participants, and then transcribed verbatim.

The three researchers conducting the focus groups and analysing the data (two PhD students [FB, AL] and one senior researcher [AB]) were familiar with qualitative research. They were registered nurses who had in the past worked in geriatric or clinical nursing for 5 to 10 years. Some of the participants were already familiar with the researchers from prior meetings concerning future collaboration within the Living Lab Dementia. All three researchers subsequently took on the roles of scientific Linking Pins, which had not yet been determined at the time of the interviews.

### Data analysis

All focus group and interview transcripts were analysed together according to Thematic Framework Analysis, which allows for both inductive and deductive approaches.<sup>26</sup> This enabled the development of new data-based themes as well as the integration of relevant factors of collaboration identified in advance (e.g. communication, relationships, roles etc.).<sup>16</sup> After initial familiarisation with the data, three researchers jointly identified a preliminary thematic framework for analysis. It was applied to parts of the data for the purpose of piloting and was adjusted after subsequent cross-checking. In the third step, all data were independently coded in MAXQDA according to the revised framework, and cross-checked afterwards. Divergent codings were discussed between the researchers until agreement was reached; ambiguities or possible interpretations were recorded in memos. The coded material was then re-sorted, summarised, and charted thematically by one researcher [FB] and summaries were reviewed by another researcher [AB].

## Results

Between March and April 2022, we conducted ten focus groups with two to four participants (duration: 45 to 100 min) and five individual interviews (duration 20 to 65 min). The discussions were mostly animated; besides pre-formulated core questions, only few prompts were necessary.

### Participants

In total, 39 people were invited, 38 people agreed to participate, and 35 finally attended the focus groups or individual interviews (see Table 1). Representing healthcare staff, 13 CEOs, nursing managers,

**Table 1**  
Sociodemographic and occupational characteristics of participants.

	Interviews (no. of participants)	Age	Sex	Professional experience (years)	Organisational tenure (years)
Stakeholder group (1): Nursing care professionals	Care organisation CEOs	44	f	2	2
	1 focus group (n=3)	30	f	3 months	10
	1 individual interview	55	m	26	26
		52	f	5	20
	Nursing managers	35	f	1,5	5,5
	2 focus groups (n=2 and n=3)	52	f	5	20
		44	f	3 months	11
		47	f	13	21
		41	f	10	15
	Care professionals	37	f	14	14
	1 focus groups (n=4)	24	f	1	1
		34	f	1 month	3
	51	f	1	16	
Stakeholder group (2): People with dementia	Interviews (no. of participants)	Age	Sex	Current housing situation and support	Time since diagnosis (years)
	People with dementia	66	m	Living with relatives, support with chores	4
	1 focus group (n=4)	55	f	Living with relatives	3
		78	m	Living with relatives, support with chores	1
		62	f	Living without relatives, but relatives support with medication, professional support for medication and chores	4
	Interviews (no. of participants)	Age	Sex	Further supportive services	Support for and relationship to person with dementia (in years)
	Informal caregivers	74	f	Escort to physiotherapy and occupational therapy appointments (nursing service)	1,5, Spouse
	1 focus group (n=2)	48	f	Support by relatives and professionals (chores)	2, Child
	Interviews (no. of participants)	Age	Sex	Active in current occupation/voluntary service (years)	Involved in dementia and care dependency (years)
	Dementia representatives	38	f	3	26
	1 focus group (n=2)	31	f	3	7
	2 individual interviews	66	m	>20	>20
		58	f	13	16
	Interviews (no. of participants)	Age	Sex	Living in residential care (years)	Memory difficulties (years)
	Nursing home residents	74	f	1,5	-
	1 focus group (n=3)	93	f	3	3
	1 individual interview	95	f	1,5	3
		87	f	5	4
Stakeholder group (3): Care and nursing researchers	Interviews (no. of participants)	Age	Sex	Involved in linking practice and research (years)	Involved in dementia care (years)
	Senior health researchers	51	f	17	10
	1 focus group (n=4)	50	m	20	12
		43	m	15	15
		62	f	20	15
	Dual practice/research role	52	m	10	>30
	1 individual interview				
	Health researchers	34	f	4	14
	1 focus group (n=3)	45	f	12	-
		42	m	14	23

and care professionals from geriatric nursing and occupational therapy participated. For people with dementia and their relatives, a total of 14 participants were recruited, among them dementia representatives from a patients' rights association, a government organisation and a community service, as well as people with dementia, nursing home residents and informal dementia carers. As for researchers, eight participants with backgrounds in health and nursing science, psychology and medicine participated.

### Findings

We identified five main themes relating to different aspects and stages of collaboration (see Table 2).

### Access

#### Little contact with research

Stakeholders' statements indicate that in their day-to-day work, care professionals have little contact with research and limited

experience towards collaboration with researchers. While they generally considered results from scientific inquiries important to their practice, care professionals described their role towards research as passive. "We just don't think about it, we do what we are told." (Care professional).

#### Inaccessibility of research

When care professionals came into contact with research, they mainly found it to be inaccessible. Few care professionals reported on previous experiences of collaboration with researchers; however, within these collaborations they mostly had operational duties instead of co-creative ones, reinforcing the impression of inaccessibility. Additionally, some participants pointed out that they felt the research topics did not align with care practice needs. "There is a perception of separate worlds. Practitioners often say 'Well, what we need is not addressed, and the questions we're really interested in are not adequately answered [by research].'" (Dual practice/research role). Nursing research in particular was perceived as an authority subjecting care professionals to its directives, but remaining inaccessible to

**Table 2**  
Identified themes and subthemes relating to academic-practice collaboration.

Theme	Subtheme
Access	Little contact with research Inaccessibility of research Speaking a common language
Expectations	Collaboration as a mutual chance Benefits for care practice and research Specifying and communicating expectations
Shaping the collaboration	Taking the lead in shaping the collaboration Supporting implementation
Linking Pins	Working together as equals Bringing special skills to the collaboration Shaping Linking Pin roles
Participation	Using easily accessible formats Creating a positive environment Acknowledging research interests

them. This was reflected in an aversion to so-called “experts’ standards”, the German national nursing guidelines developed by nursing researchers: *“What do they think we are capable of? That’s why research gives me a headache, it means additional work for us. We [only] do it because we have to implement the experts’ standards.”* (Nursing manager).

#### Speaking a common language

Participants agreed that researchers should provide care professionals with an opportunity to access the collaboration within the Living Lab Dementia. A common language was described as a potential gateway and emphasised by participants from all stakeholder groups as a prerequisite for a partnership-based collaboration. As participants expected researchers to be able to adapt their communication to various target audiences, they should facilitate the care professionals’ commitment within the Living Lab Dementia by adapting their language and expression to care professionals’ needs. *“The language of healthcare, of nursing must be used. If you start [to use terms] like RCT, cohort study, cross-sectional study, then it’s all over.”* (Health researcher).

#### Expectations

##### Collaboration as a mutual chance

The participants considered linking practice and research as an opportunity for mutual learning and benefit; however, expectations regarding collaboration within the Living Lab Dementia differed. Participants pointed out that expectations may need to be specified and should be communicated transparently. Researchers emphasised a need for continuous and transparent communication to carefully manage mutual expectations, especially regarding feasibility, time constraints and adherence to research procedures (e.g. informed consent, institutional review processes, etc.).

##### Benefits for care practice and research

Care professionals primarily expected the collaboration to result in tangible benefits for staff and clients. While they described that many care organisations frequently receive requests for research projects, their resources are limited which makes them select the most promising collaborations based on the expected benefit. *“Well, I want to get something out of it, you see? Not just doing something [together], what I want is a result.”* (Nursing manager). Above all, care professionals judged previous collaborative efforts positively if they

resulted in noticeable improvements to workflow or resident care. From the researchers’ point of view, data collection, development, and testing of methods were considered as the most important opportunities of the partnership. Adequate communication of research procedures were identified both as a requirement and a challenge to care professionals’ participation. *“Sometimes it is all about collecting data, and that’s a balancing act which is very difficult to communicate.”* (Senior health researcher).

#### Specifying and communicating expectations

Agreement on shared and mutually supported goals was described as crucial to collaboration, however it should be acknowledged that both academia and care practice may also pursue individual goals within the partnership. The development of these shared goals was expected to be time-consuming and challenging in terms of expectation management. *“It’s an interactive process to get to the point where you’re really working towards a common goal. It takes time and you don’t always achieve it.”* (Senior health researcher). Needs assessments, continuous transparent communication, and the commitment of all parties involved were recommended to help shape this process. *“What you want and what we deliver - there is friction along the way.”* (Senior health researcher).

#### Shaping the collaboration

##### Taking the lead in shaping the collaboration

Although partnership-based collaboration in general and the Living Lab in particular presented rather unfamiliar approaches for both sides, participants assigned researchers a leading role in shaping the collaboration. *“In these instances [research projects], we need someone who is well-versed in it [research] and can give us a little guidance on how to organise it [...] We have such a strong practical background, so this is a bit more difficult for us.”* (Care organisation CEO). The participants believed that researchers should adapt to care professionals’ needs, e.g. in terms of working hours, use of media, and knowledge dissemination strategies, to enable their involvement. *“The ‘movement’ - who is moving towards whom - I would say it is the mission of research to move towards practice.”* (Senior health researcher).

In keeping with its participatory ambition, participants pointed out that researchers should create opportunities enabling care professionals’ involvement in the Living Lab Dementia, which should primarily take place via specific tasks. While any involvement should be voluntary, researchers should communicate tasks clearly but without pressure. *“What they [staff] need is a clear roadmap, so that it doesn’t hover in space. This, this, and that, clear statements.”* (Nursing manager). Additionally, regular joint meetings, reliably available contact partners, and self-efficacy were described as important to care professionals’ involvement. Experiencing a sense of self-efficacy was expected to disprove the assumption that research was fundamentally inaccessible to them, and could underline the importance of their expertise and commitment to the collaboration. Participants reported that researchers should therefore foster their commitment by offering tangible opportunities to get involved in the collaboration, and to provide feedback on plans and next steps. One possibility to experience self-efficacy could be the lead in the choice of topics for joint research projects, which should be relevant to practice and therefore selected by care professionals. *“Regarding our project, I think the teams themselves should choose it, because then they are also committed to it.”* (Care organisation CEO).

Support from CEOs and nursing managers was considered crucial to successful collaboration. *“If you don’t get the management’s support, it won’t work. [...] The management must want it too.”* (Care organisation CEO). While managerial staff raised the wish for regular updates, the participants agreed that, at the operational level, the

collaboration should be as independent as possible. To ensure a tangible benefit for care practice, participants emphasised that frontline staff should be involved primarily while management should focus on supporting the collaboration on administrative and organisational levels.

#### Supporting implementation

Care professionals expected researchers' support in implementing the results of the collaborative research into practice. *"If something new is created and we implement it, then it's important that support is also provided for the implementation process."* (Care organisation CEO). CEOs from care organisations characterised the implementation of changes into everyday care as particularly resource-intensive with challenges arising through staff shortages, time constraints, and competition with day-to-day business. An additional obstacle to the implementation of innovations was that some care professionals raised concerns towards practice innovations in general and evidence-based interventions in particular, especially regarding their practicality. *"Theory is different from practice. You can have a good model, but that doesn't mean that it is applicable in the constantly changing everyday life."* (Care professional).

#### Linking Pins

##### Working together as equals

Participants from all stakeholder groups agreed that the Linking Pins as representatives from care practice and research should work together as equals. A common professional background was identified as conducive to the establishment of a working relationship between them (e.g. previous employment in nursing care of scientific Linking Pins). Since care professionals often perceived research as inaccessible, they believed that researchers should be approachable and reflect on their image, e.g. in terms of their introduction and their use of academic titles.

##### Bringing special skills to the collaboration

The two Linking Pins, who are responsible for the stimulation and conduct of the joint research projects, require a set of special skills. Participants pointed out that they should be selected on the basis of their competencies and tasks rather than their formal qualifications. For researchers taking on the role of scientific Linking Pins, supporting care professionals in identifying relevant research topics was considered an essential task. They should therefore possess analytic and moderating skills. First-hand experience with nursing care was described as beneficial for the scientific Linking Pins to gain access to care organisations and establish working relationships. Additionally, openness and authenticity were mentioned as desirable traits as they could facilitate the development of relationships. *"Openness, empathy, and a sense of 'being part of the team'. Whoever comes [to us] should not be seen as a foreigner."* (Care organisation CEO).

In the identification of relevant research topics, practice-based Linking Pins were expected to take on a mediating role between care professionals, management staff, scientific Linking Pins, and residents and their relatives. Participants therefore believed that care professionals taking on this role should be familiar with the entire care organisation, maintain good relations with all organisational levels and departments, and possess professional experience in order to know the practical dimensions of the chosen research topic. Additionally, to live up to the interdisciplinary and participatory ambitions of the Living Lab Dementia, both Linking Pins should be able to adapt their communication to the various target groups and possess pronounced social skills.

##### Shaping Linking Pin roles

Genuine interest in the collaboration and a general curiosity towards each other's perspectives were recognised as desirable for

both Linking Pins. The participants emphasised that voluntariness should be a fundamental requirement for taking on Linking Pin roles and should be considered as the primary criterion for eligibility, even if other required skills were absent or not yet well developed. *"But if there is interest and willingness and many other competences as well, maybe that can compensate for what is [was] missing."* (Care organisation CEO). As experience with the Living Lab approach was lacking on both sides, participants stated that Linking Pins should be free to develop and shape their own roles to a certain extent during the course of the collaboration. This role development should allow for the acquisition of skills considered necessary but not yet available. Reflecting on their roles over the course of the collaboration was advised in order to further advance role development.

#### Participation

##### Using easily accessible formats

Participants believed that opportunities to participate in the Living Lab Dementia should be actively enabled and easily accessible for people with dementia and their relatives. Dementia representatives pointed out that adaptability declined during the course of the disease, therefore, people with dementia should not be required to adapt to unfamiliar situations in order to participate. Instead, familiar people, formats, and occasions were considered to facilitate participation. *"A cup of coffee together, where you get to know each other, [it must be] very easily accessible"* (Dual practice/research role). This was in line with the care professionals' assessment, who mentioned mutual acquaintance and trust as prerequisites to participation and therefore considered their own close relationships a resource to enable participation. *"I could be a spokesperson, because I am the confidant of many [residents]. [...] That's a different bond of trust than when the university sends someone."* (Care professionals). Familiarity should also be pursued with regard to the methods used to support participation; both care professionals and residents agreed that physical meetings were preferable to video calls. Scheduling meetings with people with dementia was expected to be challenging in view of varying daily conditions, therefore spontaneity and flexibility were considered necessary.

##### Creating a positive environment

People with dementia emphasised the need for a positive environment and interactions to be able to participate. In their opinion, interactions should take place in an open atmosphere, and be characterised by acceptance in the event of difficulties. *"Acceptance, very important. Radical acceptance of all things present."* (Person with dementia). Participants' experiences indicated that adequate, dementia-sensitive treatment and communication cannot be taken for granted. Especially care professionals' tendency to offer too much care and to enhance dependency on care was deplored as it could impede self-determination and was considered a barrier to participation. *"I believe that we tend to give too much help rather than too little."* (Dementia representative). Both people with dementia and dementia representatives pointed out that fear of negative consequences should also be considered a barrier to participation. In view of their need for care, people with dementia or their relatives may feel inhibited to express criticism or mention discontent with care, and may therefore choose not to participate at all.

##### Acknowledging research interests

People with dementia and their relatives were generally supportive of a linkage of care practice and research, and associated their participation in the collaboration with opportunities for improved dementia care. They expressed research interest in topics concerning individuality and "humane" care, which they considered priorities in



dementia care. *“Dementia care is mainly affectionate care.”* (Person with dementia). Moreover, people with dementia remarked that non-pharmacological interventions addressing well-being and individual needs should take on a more central role in dementia research. They recognized the collaboration within the Living Lab Dementia to provide an opportunity for participation and reported interaction with others to be beneficial for their participation. *“It is what it is. [. . .] But at the same time, talking and being heard is extremely good for you.”* (Person with dementia).

## Discussion

Our study sought to explore stakeholders' perspectives on the implementation of a research partnership based on the Living Lab approach between nursing practice and research in Germany. We found that stakeholders were generally favourable towards a linkage of care practice and research, but expectations regarding content and goals of the collaboration may need to be clarified. Participants considered strong social and communicative skills necessary for collaborative research. While researchers were expected to take the lead in shaping the collaboration, they should provide care professionals, people with dementia and their relatives with opportunities to get involved.

Statements from our participants suggest that although nursing facilities are regularly asked to participate in research, care professionals themselves come into little contact with research in their daily work. This lack of exposure may be partly attributed to the specifics of nursing education in Germany, where academic education is not compulsory and the number of academically trained nurses is low.<sup>27</sup> Preconditions for the implementation of a research partnership in Germany may therefore differ significantly from those in other countries, as academically trained nurses are considered crucial to the development of “organisational cultures” supporting nursing research.<sup>28</sup>

The Living Lab presented a new approach for all participants. However, nursing researchers pointed out that care professionals may be reluctant to get involved because they judged previous efforts to participate in research to be unsatisfactory in retrospect, leading to “research fatigue”. Our findings indicate that if care professionals get involved with research, they feel they lack opportunities to influence research projects. In some cases, the statements of our participants even revealed a negative attitude towards the instances associated with research based on the impression that research and its findings were imposed on them (e.g. aversion to national nursing guidelines). Both the impressions of inaccessibility and of imposed research reflected in our findings have been identified as barriers to academic-practice collaboration.<sup>8</sup> We assume that it is crucial to communicate clearly and early on how research conducted in partnerships differs from traditional research projects, and to what degree the commitment of care professionals and other stakeholders is fundamental to successful collaboration in partnerships. To support this assumption, we refer to Vindrola-Padros and colleagues,<sup>29</sup> who attempted to implement a partnership based on the Researcher-in-Residence model. The authors reported considerable difficulties concerning staff engagement which they attribute in part to the challenge of adequately communicating the collaborative nature of the partnership; staff were reportedly difficult to involve as they had “experience of previous researchers ‘doing their own thing and then leaving’”.<sup>29</sup> This necessitated additional measures, such as intensified efforts to build trust between researchers and staff, and ongoing demonstrations of commitment to the collaborative partnership.<sup>29</sup>

One possibility to involve care professionals may be to emphasise potential benefits of the collaboration. Although the importance of tangible benefits and the need for expectation management were reflected in our findings, we concede that the term ‘tangible benefits’

may require clarification. Statements from our participating care professionals indicate that they may not consider the sole provision of research results to be a tangible benefit in itself. While prior research provides evidence that the alignment of organisational goals and research activities is critical to the success of research embedded into practice environments, and that researchers are expected to disseminate research results within the care organisation,<sup>28</sup> our results suggest that care professionals expect direct support from researchers in implementing research into care practice. This may come as a surprise as implementation of research is traditionally not considered a responsibility of health researchers,<sup>30</sup> nor is it a duty of scientific Linking Pins in the Maastricht Living Lab.<sup>17</sup> While this expectation may therefore challenge researcher's understanding of their own role within the research process, the issue of implementation has within the last decades begun to attract considerable interest among health researchers.<sup>30</sup> A major difference between clinical and implementation research is the degree of engagement with the intervention's context.<sup>30</sup> Considering the impact of healthcare professionals, people with dementia, and the individual context of the care organisations on the collaboration within the Living Lab Dementia, we acknowledge that the issue of implementation might be well placed in research partnerships, but may require additional resources and knowledge from the field of implementation research.

Participants agreed that research projects should be conducted jointly, but researchers should take the lead in shaping the collaboration. At first glance, this may seem contradictory. However, statements from care professionals indicate that they wish to participate via specific tasks communicated by researchers, which suggests that, despite their desire to get involved, they may be unsure how to contribute. Researchers were therefore expected to create opportunities enabling their involvement. Creating opportunities was described as an approach for researchers in several ways, which is consistent with the findings from Williams and colleagues<sup>8</sup> who noted that initiating relationships and involving clinicians were considered the researchers' responsibilities in academic-practice collaborations. As details on these opportunities for involvement were not discussed, researchers may have to determine individually which kinds of opportunities are welcomed by stakeholders, and – besides being specific – how they need to be designed and presented to promote involvement.

With regard to care professionals and researchers taking on the Linking Pin roles, who are charged with stimulation and coordination of joint research projects, participants emphasised a need for pronounced soft skills to build and maintain working relationships with various stakeholders. Relationships have been recognised as a central component of research partnerships in general and the Living Lab approach in particular.<sup>7,17</sup> Our findings support results from another investigation of clinicians' and researchers' perspectives on joint projects suggesting that familiarity with the clinical context and the ability to communicate via the ‘practice language’ may facilitate the development of relationships for researchers seeking to involve care professionals in joint research projects.<sup>8</sup> Adding to what Williams and colleagues identified as facilitators of collaboration,<sup>8</sup> our results suggest that experiencing a sense of self-efficacy may promote care professionals' involvement by demonstrating that within partnerships, research is not imposed, but conducted collaboratively, therefore requiring their commitment. However, as we found that offering opportunities for involvement was expected of researchers, self-efficacy may be unlikely to occur by itself unless researchers actively work towards creating suitable opportunities for care professionals to experience self-efficacy in their involvement.

Various facilitating roles outlined in the knowledge translation literature share features with the Linking Pin roles as described by our participants (e.g. *Research* or *Clinical Facilitators* etc.), however they usually require additional training.<sup>31</sup> Although the need for specific skills of the Linking Pins was reflected in our results, the possibility of

additional training was not addressed. Overall, the role of the scientific Linking Pin has many similarities to the Researcher-in-Residence, an academic who collaborates with care professionals to conduct research which meets the requirements and individual context of the care organisation.<sup>32</sup> Our findings support many observations made by Researchers-in-Residence, most notably the need to establish relationships as a prerequisite to collaboration, and the prospect of a tangible benefit.<sup>33,34</sup> Grading and colleagues<sup>33</sup> point out that, given the central role of communication and relationship building, as well as their responsibility for practice improvements, Researchers-in-Residence may need to possess a set of skills beyond what is considered typical for researchers (e.g. ability to involve diverse stakeholders, to adapt to different contexts etc.). Finally, they may need to deal with conflict and ambiguity in care practice, and should therefore be equipped with resilience and endurance to handle the “slow and sometimes frustrating process of enabling change”.<sup>35</sup> Although the need for specialised training was not discussed in our interviews, our findings suggest that researchers taking on the role of scientific Linking Pins require opportunities for mutual exchange to reflect on role development, and may benefit from specialised training to develop the professional and interpersonal skills required for their role. Likewise, practice-based Linking Pins may require additional training. According to our findings, they should be experienced care professionals who are familiar with all departments of the care organisation. However, as we found that care professionals are unlikely to have in-depth experience with research, we recognise that additional skills and methodological research knowledge may be needed for collaboration. Determining the training needs required for both Linking Pin roles may be an important next step in advancing the Living Lab approach.

Participation of people with dementia and their relatives as the final theme reflects the participatory nature of the Living Lab approach.<sup>17</sup> Although participation of people with dementia is a recognised goal in health research, it is rarely achieved, especially for those living in long-term care.<sup>36</sup> Our results suggest that participation can be facilitated by adapting the environment, language and situation to the needs of people with dementia. In our interviews, however, participation was mainly understood as verbal participation in different conversational situations. Our findings may therefore only apply to people with dementia capable of verbal communication. Considering that residents in long-term care tend to have dementia in more advanced stages than those living in the community, and are therefore more likely to have impaired verbal communication,<sup>36</sup> our findings may only apply to part of our target group. Alternative ways for people with advanced dementia and limited communication skills to participate are the subject of ongoing research, but were not addressed in our interviews.<sup>36</sup>

Finally, it should be noted that in our focus groups and interviews, an emphasis was placed on what was required to involve healthcare staff, and on what their interests were concerning the research partnership, while researchers' possible interests and needs were hardly discussed. On the one hand, this emphasis on care practice needs reflects the state of the literature on research partnerships i.e. that when setting up a new partnership, a main focus should be placed on enabling care professionals' involvement and access to this novel collaboration.<sup>37</sup> On the other hand, a partnership can only succeed if the needs of all parties are taken into account. We presume the emphasis on the care practice perspective is due to the fact that we, as researchers aiming to establish a research partnership ourselves, have put our primary focus of inquiry on the opposite perspective as we sought to understand care professionals' needs in order to set up the Living Lab Dementia. Our findings therefore do not allow us to draw generalised conclusions about the goals and needs of researchers aiming to establish research partnerships. Future investigations might focus on researchers' needs and perspectives on research partnerships.

### *Strengths and limitations*

The participation of people with dementia and their relatives in this qualitative study represents a major strength of this work. While their participation in research remains a challenge,<sup>36</sup> there are demands pointing out that participation should above all be meaningful to the individuals themselves.<sup>38</sup> Our participants with dementia confirmed that this was the case with our interviews. Their involvement was even sustained beyond this study in the form of a national working group for dementia and research, which was established during the implementation of the Living Lab Dementia.

Our study is also subject to methodological limitations. We did not examine whether data saturation was achieved, however, we were able to generate rich data. We planned three focus groups per stakeholder group, which should suffice to identify the relevant issues.<sup>39</sup> However, although we aimed for reduced group sizes in view of the virtually conducted focus groups, some groups consisted of only two or three participants, which may have limited group interaction and data richness.<sup>25</sup> Data were collected from a small convenience sample with several participants from collaborating care organisations. We acknowledge that the findings may be influenced by social desirability, especially considering the possibility that the researchers who conducted the focus groups and interviews might later take on the role of scientific Linking Pins. While we believe that all perspectives relevant to our research partnership were represented in our sample, all participants with dementia were in the early stages of dementia, and none were affected by severely impaired verbal communication. They are therefore unlikely to be representative of the population of people with dementia living in long-term care.<sup>36</sup> Finally, it must be noted that in German nursing care, geriatric and clinical nursing have traditionally been separate fields of work and distinct professions. Our findings may therefore only be applicable to long-term geriatric nursing and may not apply in acute care or other nursing contexts.

### **Conclusion**

Academic-practice partnerships require transparent communication, fair and respectful collaboration, and trustful relationships. Partnerships pose additional challenges for researchers, e.g. involving stakeholders, supporting the implementation of results, or taking the lead in shaping the collaboration. We found that creating opportunities to get involved was in many ways expected of researchers, and may be an important mechanism to ensure stakeholder involvement. However, our results also suggest that collaboration in partnerships may require stakeholders to challenge their 'traditional' understanding of the research process and their roles in it with regard to the way research is conducted in academic-practice partnerships.

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### **Declaration of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### **Supplementary materials**

Appendix A: Interview guidelines for the focus groups in each of the three stakeholder groups (pdf document). Supplementary

material associated with this article can be found in the online version at doi:[10.1016/j.gerinurse.2023.09.008](https://doi.org/10.1016/j.gerinurse.2023.09.008).

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