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Biography

My name is Kira Oberschmidt and I am in the second year of my PhD research. I have a background in Psychology, starting with a BSc at the University of Twente (2017). After my bachelor, I stayed at the University of Twente (UT) to obtain two master's degrees; one in Health Sciences, with the specialisation Personalized Monitoring and Coaching; the other in Psychology, with the specialisation Health Psychology and Technology. I completed both master's degrees with a combined colloquium in 2019. For me, these studies nicely complemented each other. Where psychology often focusses more on developing eHealth in a way that engages users and persuades them to become more healthy, the health science perspective also includes the implementation and continued use of technology.

In January 2020 I started my doctoral research at Roessingh Research and Development (RRD) in Enschede, The Netherlands. My lead supervisor is Dr. Christiane Grünloh (RRD, UT) and my promotor is Prof. Hermie Hermens (UT, RRD). RRD is a research and development SME in the area of rehabilitation technology and telemedicine with strong formalized links to one of the largest rehabilitation centres in the Netherlands (Roessingh Rehabilitation Centre) and the University of Twente.

Doctoral Research

Background

My PhD research is situated within the Pharaon project (Pilots for Healthy and Active Ageing, see also <https://www.pharaon.eu/>), which is funded under the Horizon 2020 research and innovation programme. Pharaon aims to address challenges of our ageing society and respond to the need for tools that improve quality of life, independence and overall health of older adults. The goal is to integrate existing digital services, devices and tools into open platforms that can be readily deployed. The platform will be validated in large-scale pilots in six different pilot sites across Europe, with the main aim to improve healthy and active ageing. This is done in close collaboration between research, industry and healthcare partners. Roessingh Research and Development is one of the partners in the Dutch pilot.

All pilots in the project will use the action research framework and RRD is responsible for the development of guidelines for action research in future projects. To do so, we will investigate the action research that is conducted in each pilot from a meta-perspective. The collection of appropriate information as input for such action research guidelines is part of my thesis.

We follow the definition of action research as described by Reason and Bradbury (2013), according to which action research contains different cycles of planning, action and evaluation of this action. Stakeholders are involved as co-researcher in action research projects. This active role of the stakeholders is the main focus of my thesis. Another key aspect of action research is that it takes place within the community, so changes are made and evaluated directly. Even though it is still mainly used in educational research, action research fits well within the domain of human-computer interaction (HCI) research (Hayes, 2011).

Research question and methods

Since starting my research a year ago, I planned and conducted several studies, which will be explained in more detail below. The main research question that I want to answer in my thesis is

“How can we facilitate the active involvement of stakeholders in eHealth action research projects?”

The underlying research questions supporting my aim to answer the main question are

1. What is the state of the art of multi-stakeholder action research?
2. Which different interests play a role in a multi-stakeholder project?
3. What are researchers’ attitudes and expectations towards action research projects?
4. How do relationships and networks develop in a multi-stakeholder project?
5. Which role do cultural differences play in multi-stakeholder action research?
6. What can we learn from a large scale, long term action research project?

All questions, the relationships between them, and the corresponding methods can be found in Figure 1.

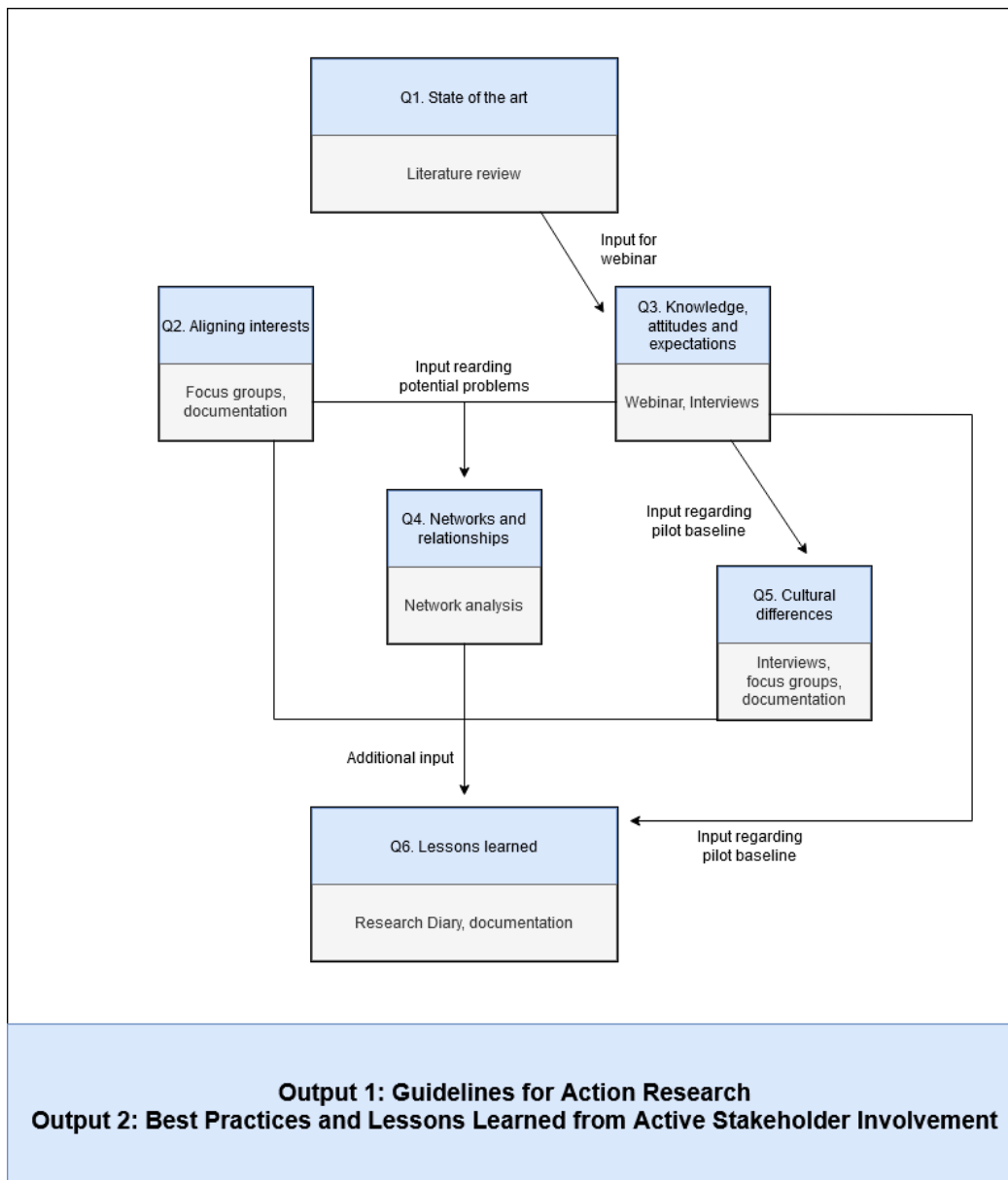


Figure 1. Overview of research questions and methods.

We will answer the overarching question regarding active stakeholder involvement both from a stakeholder and from a project perspective. Our first study on the alignment of stakeholder interests has been accepted for publication and will be explained in more detail below. From the project perspective, we started by gathering knowledge from the literature about the state of the art of eHealth action research (more information below). This gave us input for a second study that we are currently conducting, looking at the knowledge, attitudes and expectation regarding action research within our consortium. Identifying existing action research knowledge and expertise, expectations and attitudes of project partners in the early phase of the action research cycle can serve as a pilot specific baseline. This information is important when the overall experiences made in the specific pilot is analysed and interpreted in later stages of the project. In the future, we plan to supplement interviews and focus groups with less traditional methods like network analysis or the analysis of a research diary. Involving the other project partners in such methods goes beyond the traditional role that participants have in interviews or focus groups and can hopefully help us and others learn from what we did in our project. However, those methods are of course still valid and useful for other parts of the research. Meeting and project documentation, like minutes or deliverables also play a big role and can help to understand the different stakeholders and their positions better. Therefore, such documentation is also included in my research.

Work to date

My first study was about the alignment of interests that the various stakeholders and parties brought into the Dutch pilot. This study aimed to answer the second research question, “Which different interests play a role in a multi-stakeholder project?”. Focus groups were conducted with older adults and with the technology providers in the group. Additionally, information from meetings and project documentation was taken into account. Based on these findings we mapped the interests of different parties within the project. We concluded that such explicit mapping and the formal and informal discussion of stakeholder interests can be very valuable for a project, because partners are aware of each others expectations and the project leader can cater better to individual needs. Additionally, we became critically self-aware of ageist assumptions that might still be present despite our aim to avoid those stereotypes and bias. Therefore, we also made the recommendation that other researchers should also try to be more aware of such underlying assumptions, for example through external reviews. I presented this paper at the OzCHI conference in December 2020.

The second study was a literature review on action research in eHealth studies, addressing Q1: “What is the state of the art of multi-stakeholder action research?”. We describe the setting of 40 different eHealth action research projects, described in 40 papers. Part of the analysis included what kind of action research model was used. We found that such descriptions were often lacking and should be improved in future studies. Additionally, we looked at the best practices and lessons learned from using action research. Recommendations from our findings relate to the role of the researcher in such projects, as they need to share their tasks with the stakeholder co-researchers, but have some other action research specific roles to fulfil as well. Other recommendations are made regarding the documentation and dissemination of research outcomes, so that they are understandable and accessible for the different stakeholders, both within and outside of the academic community. I am currently in the process of submitting this paper, which will be the second article to be included in my PhD thesis.

The literature review is currently followed up by an investigation for the third research question, “What are researchers’ attitudes and expectations towards action research projects?”. These researchers had no previous experience with action research, so we hosted a webinar to inform them about it. This way, they can plan their pilots with the principles of action research in mind. Later on, the different pilots can be compared more easily if everybody is on the same page regarding action research. During this webinar, we presented the results from our literature review and participants discussed their ideas on several questions related to action research in breakout sessions. To see how the webinar participants and their co-researchers feel about doing action research, interviews will be conducted. In these interviews, their expertise, attitude towards, and expectations of action research are going to be discussed. This will serve both as input for additional activities and as a baseline measure to be used in later parts of the project. The outcomes of the webinar and the interviews will also be combined in a paper about getting novice action researchers started with the framework. Depending on the results this might include their struggles, need for information or guidance or concrete suggestions for how to initiate action research. At the time of

writing this application, the interview study is ongoing and interviews are expected to be conducted until the end of January.

Potential next steps

After rounding off this third study, the next steps will likely include a network analysis of the relationships between the partners in one of the pilots, meant to answer the fourth research question “How do relationships and networks develop in a multi-stakeholder project?”. By looking at the networks that have developed between the partners both on the national and international level, we hope to learn more about how different stakeholders position themselves within research projects. Potential outcomes could for example include differences in how the various types of partners (researchers, technology providers, health care professionals etc.) see their role and position in the project, and whether their description of each others role and position is congruent. The results might show pitfalls for multi-stakeholder projects, for example if partners feel inferior to the researchers, instead of being equals in the project. Additionally, while project documents might show the intended hierarchy and structure of a project, this might look differently in practice. It would therefore be interesting to investigate how and why this structure changes once the project actually starts. Lastly, comparing a stakeholder’s self-described role and position does not necessarily align with how others described them. Analysing this mismatch might also present interesting results.

Another interesting opportunity is to focus on cultural differences regarding stakeholder involvement, as the project’s pilots are situated in five different European countries. The question we want to address here is Q5, “Which role do cultural differences play in multi-stakeholder action research?”. It is possible that in different cultures non-academic stakeholders like technology providers or health care professionals have more or less knowledge about, or are more or less willing to participate in, academic research. Even if no differences were found this would be interesting, as it would mean that recommendations can be generalized to different cultures more easily.

Lastly, to evaluate and learn from the overall process, a reflective study will be conducted, answering the final research question “What can we learn from a large scale, long term action research project?”. This will include reflections on at least the Dutch pilot, but hopefully others as well. We will of course include our researcher perspective, but hope to also involve the other stakeholders in some way. An idea would be to compare the different perceptions of the stakeholder groups in the project. However, this also depends on the further developments within the project.

Contribution

The final thesis will contribute to the growing literature on stakeholder involvement in eHealth studies. So far, while more and more studies are including stakeholders at some point(s) in the project, they rarely reflect on this process. This makes it difficult for others in a similar situation to learn from their mistakes, or to copy what worked well. In my thesis, I hope to offer some guidance for stakeholder involvement. Researchers looking to actively engage various stakeholders in their project will find points of attention and recommendations for how best to include different parties. We plan to come up with concrete suggestions or guidelines for eHealth action research in general, and active involvement of multiple stakeholders specifically.

With this thesis I hope to generate more attention for active stakeholder involvement, as well as more guidance for those trying to actively involve their stakeholders. Hopefully, this will help to convince researchers and other eHealth partners to include stakeholders more actively in the future and give them the tools they need to do so. Projects can benefit greatly from more engaged stakeholders, for example, because outcomes align better with stakeholder needs and are more embedded in the community.

ECSCW 2021 Doctoral Consortium

During the doctoral colloquium, I hope to sharpen the focus of my research, which is currently very broad. To plan the next steps of my research a more concretized research question is needed. There are several related issues that I would like to discuss during the colloquium:

- My current topic, “Active involvement of stakeholders” is very broad. I would like to hear suggestions for narrowing this down, while still keeping the results useful for researchers and AR projects.
- There are some aspects of active stakeholder involvement that I plan to investigate. But it would be helpful to hear if others have suggestions for additional topics or aspects of stakeholder involvement I am overlooking in my current plan.
- Another problem we are struggling within our project (and I expect many others do too) is the impact of the pandemic. It has been difficult for us to get in direct contact with some target stakeholders (e.g. older adults that are more isolated now, but also care personnel as they are very busy). I would like to hear from others how they tackle this problem, and together discuss some strategies for reaching those target groups even in the current situation.

References

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