INTERNSHIP REPORT

Contribution of PAR: towards a healthier neighborhood

Promoting health in a low-SES neighborhood by collaboration of residents and key stakeholders

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Summary

It is known that low socioeconomic status (SES) neighborhoods are facing multiple challenges, an important one is individual health. In recent years, research has shown the importance of psychological, social and environmental factors for the health of individuals. It is shown that there is a relation between the SES of neighborhoods and the physical functioning of its residents (Feldman & Steptoe, 2004). So, people living in a low-SES neighborhood are associated with low physical functioning. Additionally, low-SES neighborhoods experience multiple problems such as loiterers, an unsafe environment and poverty. These problems that arise may be a source of chronic stress for the residents resulting in an increased risk of poor individual health (Steptoe & Feldman, 2001). Nowadays, municipalities in the Netherlands are working together in order to promote health in low-SES neighborhoods where people live with diverse cultural backgrounds such as Moroccan, Surinamese and Turkish (Bijsterveld, 2022). Yet, it is seen that municipalities are frequently using top-down approaches in order to tackle health challenges within these neighborhoods (Span *et al.,* 2012). These top-down approaches are very authoritarian rather than relying on social interactions. Therefore, focusing on different, more participatory approaches is necessary.

One such participatory approach to tackle these health challenges is Participatory Action Research (PAR). PAR is a form of research that focusses on the full integration between action and research. For this research and in PAR in general, the community includes all the key stakeholders involved in the PAR topic, which makes all of them potential PAR-participants (Eelderink, 2020). By joining together the community, it offers the possibility for the people involved to collaborate together to change and/or improve the current situation by making use of their own talents and possibilities. Therefore, collaboration throughout the PAR process, between residents and professionals are crucial to work towards a healthier neighborhood. Therefore, this research is going to focus on the contribution of PAR in a low-SES neighborhood in The Hague: Moerwijk. This neighborhood consists of a community with diverse cultural backgrounds and faces different direct and indirect health challenges. The research objective is to gain insights into how the system can foster collaboration between residents living in a low-SES neighborhood and its key stakeholders to promote health by using PAR as a tool by identifying the needs, in relation to health, of the residents and its key stakeholders in the low-SES neighborhood. The research question is as follows: "*How can the system foster a collaboration between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?"*

In April 2021, SevenSenses performed a PAR in Moerwijk. Participants were residents and key stakeholders that wanted to work together towards a healthier neighborhood by using PAR as a tool. To answer the main research question, a qualitative study design was chosen. Ten semi-structured interviews were held. The participants consisted of residents, PAR researchers, healthcare professionals, a manager and a client. To guide along the interview and to answer the research question, the collaboration model was used in a system context (the low-SES neighborhood Moerwijk). The model consisted of three dimensions whereof the sub questions were derived:

- **SQ1:** How can the system foster <u>communication</u> between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?
- **SQ2:** How can the system foster <u>coordination</u> between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?
- **SQ3:** How can the system foster <u>cooperation</u> between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?

Findings related to **SQ1** showed that the system can foster communication if it is able to advocate **trust** and **lower the threshold** between residents and stakeholders in order to foster collaboration. Regarding trust, residents were clear that there was still mistrust between residents and stakeholders but it had improved due to PAR. Moreover, PAR contributed to lowering the threshold between residents and stakeholders to foster communication. **SQ2** showed that within the coordination dimension two concepts emerged: **awareness** and **agreement**. It is shown that to foster coordination these two concepts are able to be improved by PAR. Awareness about the needed tool was an important concept since all participants mentioned they did not have these tools. However, PAR showed them awareness on what they should need. Additionally, agreement about the shared goal was seen as another factor to foster coordination by using PAR as a tool. Participants mentioned that they did not always agreed but PAR contributed to a more aligned goal between residents and stakeholders. Last, **SQ3** showed that within the cooperation dimension two concepts emerged: **trust** and **acknowledgement**. It is shown that to foster cooperation these two concepts are able to be improved by PAR. Namely the residents acknowledged that acknowledgement increased due to the use of PAR as a tool. They felt that they were taken more seriously which also resulted in an increased trust. Cooperation is about working towards the shared goal and participants mentioned that when you need to work towards that goal, trust between residents and stakeholders is a key element.

Putting these findings into a broader perspective, this research accentuated that PAR could be an effective tool to apply when it comes to fostering collaboration between stakeholders in order to promote health in a low-SES neighborhood. Besides being widely used in public health research in the past decades, PAR is widely used around the globe each in different contexts and systems such as the marine ecosystem, housing and sustainability. This emphasizes the possibilities and opportunities that comprise PAR as a tool. The findings indicate that PAR as a tool is able to promote certain factors to foster collaboration which may imply that these factors can be used in different contexts on how to foster collaboration. For example within organizations, municipalities and education where stakeholders could profit from a fruitful collaboration on multiple levels. The relevance of this research in science and society is embedded in PAR itself, PAR serves as bridge between science and practice. This entails that during PAR, the PAR participants will form an initiative of their own to put into practice afterwards resulting in a fine line between science and society.

In conclusion, this research showed that PAR could definitely be a tool to foster collaboration in order to promote health in a low-SES neighborhood. The findings of this research could be applicable to different contexts where collaborative practices are essential for success. The different factors that contributed to fostering collaboration may be integrated in the PAR process to improve collaboration during PAR. By showing that PAR is able to foster collaboration in order to promote health, we could be one step closer in bringing science and society together. A multiple case study would be recommended for future research to improve validity and reliability.

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Table of contents

1 Introduction

It is known that low socioeconomic status (SES) neighborhoods are facing multiple challenges, an important one is individual health. In recent years, research has shown the importance of psychological, social and environmental factors for the health of individuals. More importantly, evidence suggests that contextual factors such as community characteristics and family are important in maintaining physical health and in the prevention of illness. It is shown that there is a relation between the SES of neighborhoods and the physical functioning of its residents (Feldman & Steptoe, 2004). So, people living in a low-SES neighborhood are associated with low physical functioning. Additionally, low-SES neighborhoods experience multiple problems such as loiterers, an unsafe environment and poverty. These problems that arise may be a source of chronic stress for the residents resulting in an increased risk of poor individual health (Steptoe & Feldman, 2001).

Nowadays, municipalities in the Netherlands are working together in order to promote health in certain areas such as low-SES neighborhoods where people live with diverse cultural backgrounds such as Moroccan, Surinamese and Turkish (Bijsterveld, 2022). There was a large-scale initiative to promote for healthier neighborhoods among different municipalities in the Netherlands called '*Gezonde Wijk in Praktijk'* (healthy neighborhood in practice). This initiative achieved positive results and emphasized that top-down approaches are very ineffective in tackling these health challenges. Instead, they advised to bring important stakeholders together on neighborhood level in order to achieve positive results in regard to health promotion (Rijksoverheid, 2013). Yet, it is seen that municipalities are frequently using top-down approaches in order to tackle health challenges within these neighborhoods (Span *et al.,* 2012). These top-down approaches are very authoritarian rather than relying on social interactions which results in a low level of trust between municipalities and residents, a lack of ownership of their health and no understanding of the relevance of the topic (Eelderink, 2020). Therefore, focusing on different, more participatory approaches is necessary in order to promote health in a low-SES neighborhood.

One such participatory approach to tackle these health challenges in a low-SES neighborhood is Participatory Action Research (PAR). PAR is a form of research that focusses on the full integration between action and research. This method actively involves the community in which the research takes place, it is a reflective process which is directly linked to action (Baum *et al.,* 2006). For this research and in PAR in general, the community includes all the key stakeholders involved in the PAR topic, which makes all of them potential PAR-participants (Eelderink, 2020). Within every step of the research process, the participants are involved and their feedback is directly integrated by doing PAR. The outcome of this type of research is not necessarily a report, on the contrary, the outcome is focused on the action such as initiatives from the community (Eelderink *et al*., 2020). PAR aims to actively involve the community in order to promote action and to tackle a societal complex problem. All the more reason to perform PAR in a low-SES neighborhood were residents and stakeholders should collaborate in order to tackle these health challenges.

PAR joins together the community involved around a complex problem in the system where action is needed. For this research the system is defined as: "*complex whole of related parts"—whether it is biological (e.g. an ecosystem), structural (e.g. a railway system), organized ideas (e.g. the democratic system), or any other assemblage of components comprising a whole."* (Cabrera, 2008, p.301).The system could be seen as the low-SES neighborhood which is in need of health promotion. By joining together the community, it offers the possibility for the people involved to collaborate together to change and/or improve the current situation by making use of their own talents and possibilities. Therefore, collaboration throughout the PAR process, between residents and professionals are crucial to work towards a healthier neighborhood. A study of Warr *et al.* (2013) has shown that health promotion in low-SES neighborhoods is challenging due to conflicting perspectives of the community, organizations and healthcare professionals. Health professionals need to find a way to navigate between bottom-up and top-down approaches in order to find a more collaborative

approach for the local context to promote health (Warr *et al.*, 2013). PAR could be the link to connect these stakeholders together to tackle complex problems in a low-SES neighborhood.

There is little to no research on how PAR could contribute to an improved and sustained collaboration. Therefore, this research is going to focus on the contribution of PAR in a low-SES neighborhood in The Hague: Moerwijk. This neighborhood consists of a community with diverse cultural backgrounds, such as Moroccan and Turkish, and faces different direct and indirect health challenges such as poverty, mental health problems and an unsafe environment (Seven Senses, 2021). The main research objective is to gain insights into how the system can foster collaboration between residents living in a low-SES neighborhood and its key stakeholders to promote health by using PAR as a tool by identifying the needs, in relation to health, of the residents and its key stakeholders in the low-SES neighborhood. The research question is as follows: "*How can the system foster a collaboration between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?"*

2 Contextual background

This chapter will elaborate on the real life context in which the study will take place. Different stakeholders are being explained and the PAR that has been done in 2021 will be discussed.

2.1 Real world context

This study took place in a low-SES neighborhood in The Hague, since this city is a metropolis, the research conducted may be applicable and generalizable with other big cities in Western Europe. The low-SES neighborhood in The Hague is called Moerwijk, it is a neighborhood which faces multiple direct and indirect health challenges every day such as mental health problems, an unsafe environment and poverty (SevenSenses, 2021). There are 20.995 residents living in this neighborhood at the end of 2021 and it is a neighborhood with diverse cultural backgrounds. Among these residents, 23% is native to the country, 15% has a western migration background and 62% has a non-western migration background. Residents with a non-western migration background are from Morocco, Antilles, Suriname, Turkey and other (14%) (Bijsterveld, 2022).

Moreover, this neighborhood is one of the poorest and unhealthiest neighborhoods in the Netherlands (Harmsen, 2021). According to recent statistics of the RIVM (2020), 67.0% of the population in Moerwijk perceived their overall health as good or very good. This percentage is relatively lower relative to the municipality of The Hague (75.3%) and to the Netherlands (78.4%). Additionally, the percentage of chronically ill is relatively higher in Moerwijk (36.2%) in comparison to The Hague (32.6%). Being one of the poorest neighborhoods of the Netherlands, recent statistics show that 34.4% of the population in Moerwijk has difficulties getting by compared to 13.9% of the Netherlands in general. Yet again, this emphasizes the difficulties that Moerwijk faces in day-to-day life.

Different health promotion initiatives have been conducted in this neighborhood for example the previously mentioned initiative '*Gezonde Wijk in Praktijk*' which has been done in 2008-2011. Another organization which is committed to improve health in The Hague is 'Gezond en Gelukkig Den Haag'. This organization consists of different organizations (municipality, GGD and insurance companies) that collaborated together in order to tackle health problems in The Hague. In addition, last year in 2021, SevenSenses performed PAR in Moerwijk, The Hague, in order to promote health in this neighborhood.

2.2 Participatory Action Research & SevenSenses

PAR and SevenSenses go hand in hand, SevenSenses is a Dutch enterprise founded by Madelon Eelderink and it is totally focused on PAR. The aim of SevenSenses is to empower people all over the world by doing PAR. PAR makes sure to focus on what the community (i.e. residents, professionals and other stakeholders) wants and needs in order to tackle complex problems by making use of the talents, manpower and opportunities within the community. By doing PAR, the involved participants are also co-researchers, they are involved throughout the research process and they co-create the research together with the researcher. Within SevenSenses, the term '*community-up'* is frequently used as part of the PAR process. This term is developed within SevenSenses because they observed that in complex real-world settings, top-down approaches as well as bottom-up approaches fell short within these settings. The term community-up links these two approaches because the community of stakeholders will tackle these complex problems together, whether they are from the 'top' or the 'bottom' (Eelderink, 2020).

In April 2021, PAR was conducted by SevenSenses in Moerwijk, a low-SES neighborhood in The Hague. The aim was to move towards a healthier neighborhood by doing PAR. Multiple stakeholders within this neighborhood were asked to participate in this research. Not only the residents participated, also healthcare professionals and organizations, coaches and the municipality participated in the PAR. All these stakeholders were brought together in order to explore what their needs were in regard to promoting health within the community of this neighborhood. They participated in multiple focus groups as part of the PAR process, during these focus groups different topics were discussed as well as solutions and available chances which could promote health in the neighborhood. As a result, the community came up with different initiatives such as the improvements of the community center, improvements of the playing fields and the development of a cookbook with the neighborhood (SevenSenses, 2021).

2.3 Stakeholder analysis

Different stakeholders were involved during the PAR in 2021. These stakeholders are further discussed in the next paragraphs. They were direct or indirect involved during the PAR process and contributed to improve and promote health in the low-SES neighborhood Moerwijk.

2.3.1 Residents in the low-SES neighborhood Moerwijk

The residents in the low-SES neighborhood Moerwijk are an important stakeholder in this research. As previously mentioned, these residents face multiple health problems such as mental health and poverty. As shown before the residents in Moerwijk perceive their health, compared to the Netherlands in general, lower than on average. Additionally, these residents have different nationalities making Moerwijk a neighborhood with diverse cultural backgrounds.

2.3.2 Healthcare professionals active in Moerwijk

The healthcare professionals active in Moerwijk are important stakeholders in this research. They could be general practitioners, lifestyle coaches, psychologists and more. They aim to improve and promote the health of the residents living in the low-SES neighborhood, Moerwijk.

2.3.3 GGD Haaglanden

The GGD Haaglanden is a municipal health service in the region of the Haaglanden and within this region it is active in nine municipalities of the Netherlands. GGD Haaglanden aims to guard, protect and promote the

public health in these municipalities including The Hague. The residents of these municipalities are able to go there for advice, prevention and treatment (GGD Haaglanden, 2021).

2.3.4 Gezond en Gelukkig Den Haag

Gezond en Gelukkig Den Haag (GGDH) is an organization focused on The Hague. It is an initiative of the municipality of The Hague, healthcare and welfare partners within the '*Stichting Transmurale Zorg Den Haag*' (Foundation Transmural Care The Hague), LUMC-Campus The Hague, citizens' initiatives, knowledge institutes and the two insurance companies CZ and Menzis. So, it is a big I initiative consisting of important stakeholders promoting public health in The Hague. GGDH aims that every resident in The Hague, within its own possibilities, can be as healthy and as happy as possible. Every resident has the right to a healthy and happy life which GGDH commits to. According to GGDH, this is a necessity since the health differences are major between the different neighborhoods in The Hague.

2.3.5 Preventie Coalitie & SevenSenses

The Preventie Coalitie (Prevention Coalition) was the client of SevenSenses. On their request, SevenSenses performed PAR in The Hague. They are both important stakeholders in this research since they were directly involved within the PAR process. SevenSenses had at least three Participatory Action Researchers deployed whom were involved throughout the process.

2.3.6 Municipality the Hague

The municipality of The Hague is also an important stakeholder since they were also a partner in the PAR process in 2021. They were more in the background since they indirect involved within the PAR because they were also a part of the Preventie Coalitie.

3 Theoretical background

The objective of this study is to gain insights into how the system can foster collaboration between residents living in a low-SES neighborhood and its key stakeholders to promote health by using PAR as a tool by identifying the needs of the residents and its key stakeholders in the low-SES neighborhood. In this chapter, the concepts will be discussed regarding the objective and from there the theoretical model will be explained. At last, considering these concepts and the model as a basis for this research, the sub-questions are presented.

3.1 Systems Thinking

Systems Thinking is a concept used to understand complex problems by identifying how causal relationships and feedback works in day-to-day practices (Haraldsson, 2004). Systems Thinking has been applied in different fields such as engineering, economics and ecology. Through this research it was shown that systems are complex, constantly changing and has components within the system that are all connected. Within the system, these components are mostly non-linear relationships which are usually unpredictable (Mutale *et al.*, 2016). Systems Thinking has been adopted in health context as well to understand the relationships within systems to tackle complex health problems and risk factors. It has the potential to understand the entire system and additionally to understand, design and evaluate interventions that improve health (World Health Organization, 2010). According to the WHO: *"Systems thinking can provide a way forward for operating more successfully and effectively in complex, real-world settings. It can open powerful pathways to identifying and resolving health system challenges, and as such is a crucial ingredient for any health system strengthening effort."* (World Health Organization, 2010, p.19).

The WHO's framework of health system building blocks is shown in figure 1. This figure shows how an intervention, such as PAR, might flow through, react with and impact the system. Hereby, the system means the low-SES neighborhood Moerwijk. The WHO Health System Framework shows how different building blocks may influence the outcome seen in figure 1. The framework emphasizes that between the building blocks, there are interactions taking place and relationships forming, changing or halted. These dynamics lay a foundation for this research to understand the complex and dynamic relationships between the residents and its key stakeholders through a holistic approach. It takes the system into consideration as a whole and identifies relationships in order to operate successful and effective in real-world settings.

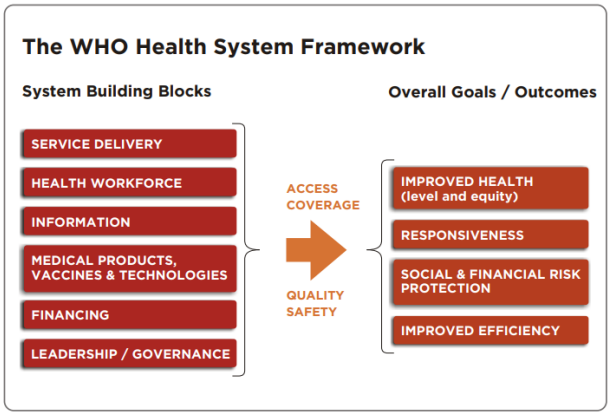

Figure 1: The WHO Health System Framework (World Health Organization, 2010, p.31)

3.2 Participatory Action Research

PAR is a form of research that distinguished itself by the fact that it involves action as a result rather than a report or paper. PAR, in public health context, aims to improve health and reduce health inequities by involving the community, who in turn, take actions to improve their health (Baum *et al*., 2006). PAR seeks to tackle complex problems by doing joint research of the situation and the perspectives of the diverse stakeholders around the topic. By doing this, it becomes clear how the complex problem is rooted within the system and how to tackle this (Eelderink, 2020). The aim is to improve and change the situation to a (more) desirable situation as determined by those involved. As shown in figure 2, these are the three facets that distinguish PAR from the more standard research. The participatory part emphasizes the collaboration with and between participants, it aims to empower the participants to take ownership of, for example, their health. The action indicates a real change in real-life settings, participants are empowered to take action upon themselves even after the PAR. The research part indicates the mind and knowledge the community can spread among each other, forming new knowledge and documented lessons.

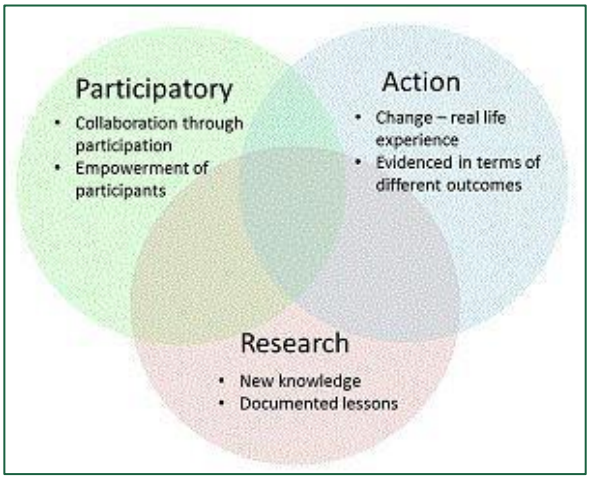

Figure 2: The linked facets of Participatory Action Research (Learning for Sustainability, 2020)

3.3 Collaboration

Nowadays, a shift is seen towards a more holistic approach or integrated approach to health. It is clear that not only factors on a personal level such as genetic predisposition, age, gender and behavior influence health. Also factors on a socio-economic level such as education, income, and accessibility to care has proven to have an impact on health. Therefore, to promote the health of residents, an integrated approach is needed from different sectors (Rijksoverheid, 2013). Therefore, collaboration between key stakeholders is needed to tackle complex problems from an integrated approach. Schuh *et al.* (2014) proposed a model where collaboration and its dimensions were explained shown in figure 3. They stated that collaboration has three dimensions: "*Characteristically for collaboration is that the collaborating entities communicate with each other, coordinate their activities and cooperate in order to accomplish a shared goa*l" (Schuh *et al*, 2014, p.3). The shared goal for this research is promoting health in the low-SES neighborhood Moerwijk by using PAR as a tool.

In this context, *communication* implicates information-sharing and sense-making. Sharing information is important when it comes to collaboration. And with sense-making it is important that information is well interpreted to understand the complex problems. Sense-making is not done individually, it is using all the existing knowledge between the stakeholders (Schuh *et al.*, 2014). The second dimension is *coordination*, which implies managing activities, but also synchronizing tasks and managing available resources. Within the proposed framework, resource-pooling and goal congruence are the two factors important for coordination. Resource-pooling is allocating the necessary information, equipment and human resources in order to reach the shared goal. Additionally, goal congruence conveys that there is a mutual agreement and understanding of the shared goal by all the stakeholders collaborating. Coordination is also linked to productivity, the higher the coordination the higher the productivity (Schuh *et al.*, 2014). The last and third one is *cooperation* which indicates that all stakeholders understand the shared goal and work together to reach this goal. Cooperation between people will lead towards better performance and it should have a form of leadership to encourage this. The system should foster attitudinal factors, such as committing to a common goal (Schuh *et al.* 2014). Within this framework, the two factors within cooperation are collaborative behaviors such as empowerment of the stakeholders by making shared decisions, creating ownership and by doing cross-functional activities to cooperate across different levels and functions. These three dimensions together form the basis fostering collaboration.

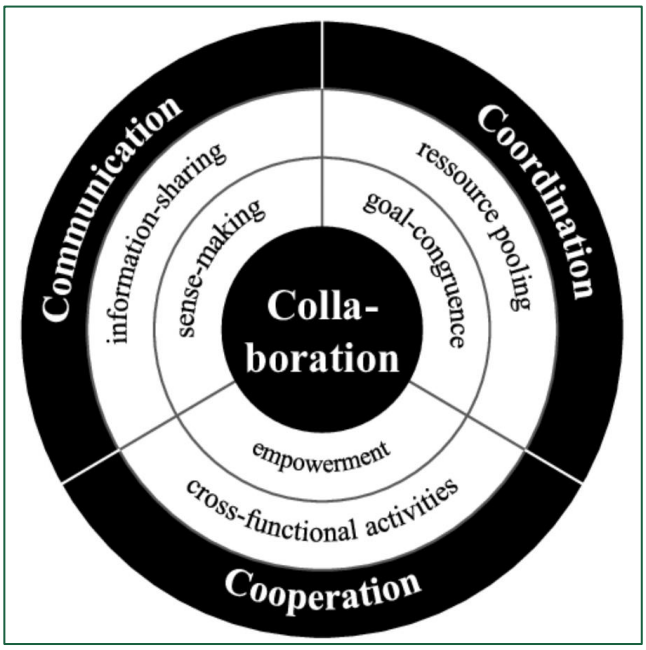

Figure 3: Framework for collaborative practice (Schuh *et al.*, 2014, p.3)

3.4 Conceptual framework

To support the research question, a conceptual framework has been chosen (see figure 4). It should be noted that there are more possible frameworks that will fit the research aim, but this research will make use of the framework for collaborative practice by Schuh *et al.* (2014) in order to support the research question. This framework is chosen since it gave a clear overview of three dimensions, each with two factors resulting in a model which was easy to use for this particular context. The framework is adapted to show which factors there are needed to foster collaboration in a system context where PAR took place. The system context for this research is the low-SES neighborhood Moerwijk where PAR took place in 2021 by SevenSenses. For this research, the focus is on the collaboration between residents and its stakeholders and what the system can do in order to promote health in a low-SES neighborhood by using PAR. As mentioned in paragraph 3.3, to foster collaboration three dimensions are seen: communication, coordination and cooperation. These three dimensions lay a foundation for this research to understand how to foster collaboration in a system context by using PAR as a tool, seen in figure 4. Three sub-questions are drafted based on the conceptual framework.

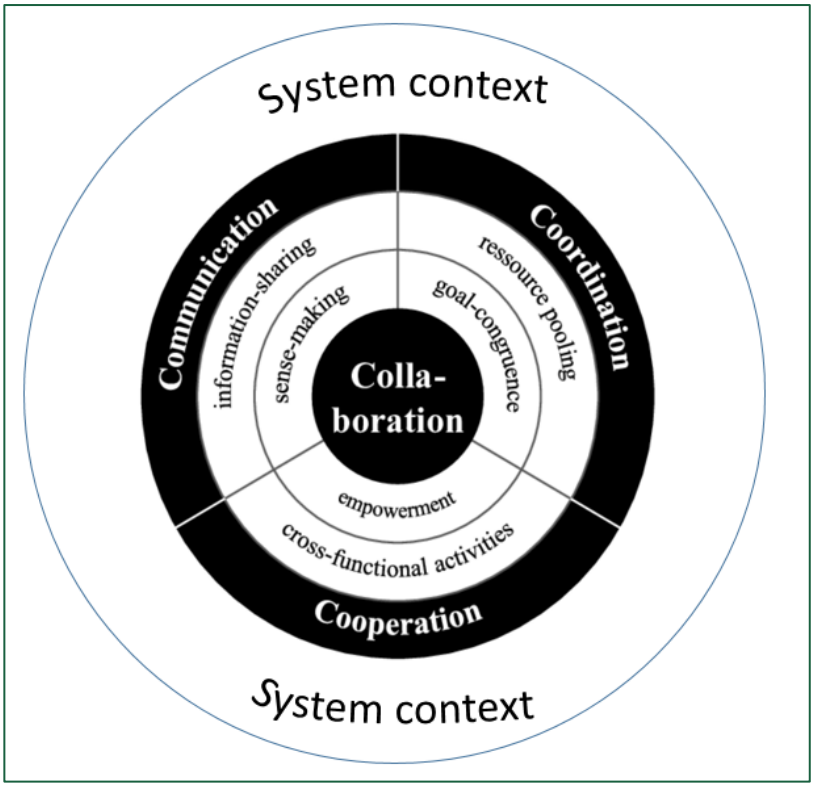

Figure 4: Fostering collaboration in relation to PAR in the system context (adapted from Schuh *et al.*, 2014).

3.5 Research questions

The main research question is as follows: "*How can the system foster a collaboration between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?"* The main research question will be supported with the following sub questions based on the conceptual framework:

1. How can the system foster communication between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?

2. How can the system foster coordination between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?
3. How can the system foster cooperation between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?

4 Methods

4.1 Study design

The study design is a qualitative research approach, it is a single case study design since it has been focused on the low-SES neighborhood Moerwijk in The Hague (Netherlands) where PAR took place about a year ago. The aim of this research is to gain insights into fostering collaboration between residents in a low-SES neighborhood and its key stakeholders in order to promote health and using PAR as a tool. To fulfill this aim, a qualitative method has been used by conducting semi-structured interviews with the residents and the key stakeholders who participated in the PAR conducted by SevenSenses. By doing this, it allows the participants to be open, dynamic and elaborate on topics they feel are important to discuss. This allows for unexpected topics to emerge which could be relevant themes to address the research question. Nonetheless, the interviewer has guided the conversations through the topics that are mostly predefined in the interview guide.

4.2 Sampling strategy

Since PAR had been done in April 2021 the low-SES neighborhood Moerwijk, the researcher has made use of the contacts of SevenSenses. A list was made with all possible interviewees via Evert Jan van Hasselt and Wilma van der Vlegel whom were involved during the PAR. The participants were reached by email and they were indirect or directly involved during the PAR process in 2021, they are 18 years and older and they are all volunteers. The residents have received a different email than the other stakeholders due to possible language barriers and the avoidance of jargon. The other stakeholders were the client of this PAR process, healthcare professionals, general practitioners, coaches and more whom were direct or indirect involved within the PAR process in Moerwijk. Additionally, two Participatory Action Researchers of SevenSenses were interviewed as well since they performed the PAR. Once the possible participants had confirmed that they were able to participate in this study, they received additional information by telephone or email.

4.3 Data collection

The data was collected by doing semi-structured interviews. Before the interview, participants filled in an informed consent form. The interviews were conducted in Dutch and also transcribed in Dutch. The interviews took place in The Hague in real life or via Zoom when an online meeting was preferred. The interviews would follow the flow of the interview guide made by the researcher, the interviews were semi-structured which allows other topics that may be introduced by the participants. At the start of the interview, introductory questions were asked to build rapport. The interview followed an hourglass shape starting from broad to more specific questions and ending with a general overview of the topic. The interviews took 30 to 60 minutes and field notes were taken. Furthermore, the interviews were recorded with the permission of the participants to allow transcribing. The recordings were done via a personal mobile telephone or via a laptop. The audio file were stored on these devices which were to be deleted after transcription.

4.4 Data analysis

First, the validity of the research instrument was measured. To ensure validity the research instrument which in this study is the interview guide, must measure what is intended to measure. By critically assessing the interview guide and by doing two trials runs with colleagues, the validity is high. Overall the validity is reached due to the fact that the interview guide used topics originated from the theoretical model. To ensure validty even more, a member check was conducted. When looking at the data saturation, Guest *et al.* (2006) explained that data saturation in qualitative studies can be met with a sample of at least 12 participants. Although this goal is not met since ten participants were included, no new concepts emerged from the data. So, data saturation seems to be met.

After the data collection, the interviews were transcribed by the researcher. The transcripts were stored in a secure folder in Dropbox. Consequently, the transcribed interviews were coded with Atlas.ti. This is a qualitative data analysis and research software tool. A deductive analysis was used to answer the research question. This allows for a base level codebook derived from the theoretical framework. During data analysis, possible new codes emerged and were added to the codebook. It should be noted that it is an iterative process. In this study, concepts emerged when participants repeatedly emphasized certain concepts that fit the theoretical model. Additionally, each phase has already its own concepts but by overviewing broader themes, concepts emerged. Each participants could add new concepts to the codebook. It is an iterative process, first the information was organized into categories derived from the theoretical model and the research question, this is called content analysis. Hereafter, a thematic analysis was done where overarching themes were discovered. Throughout the process the codebook was updated, the final codebook is added to the annex.

4.5 Ethics

Prior to the interviews, the participants were informed about the study and in addition an informed consent was sent to the participants via email. The information that they received consist of were the data would be stored, how long the data would be stored and how the data was handled. Furthermore, the participants were aware that they would be recorded and would only be interviewed if they sign the informed consent. All data will be confidential and pseudonymised. The participants have the freedom to withdraw from the study at any time without giving a reason. Additionally, they could request at any time to destroy the data they contributed. After conducting and transcribing the interview, the audio file was immediately erased. The transcribed interviews will be secured on a secure folder in Dropbox provided by SevenSenses.

4.6 Limitations

Limitations by doing a case study is that it will not be fully generalizable since it is one case study. When a multiple case study is chosen, more data will be obtained for a more in-depth and broad understanding of the topic. However, doing a multiple case study was a challenge due to time constraints. Another limitation could be the conceptual framework that is used. It can cause limitations since it is possible that other findings are overlooked due to the boundaries of using a model. However, the model will give guidance and a clear focus to this research.

5 Results

This chapter displays the results that were obtained from ten interviews that were conducted with people who were direct or indirect involved in the PAR held in April 2021 in the Netherlands.

A total of twenty people were invited to participate in this study, the list was provided by SevenSenses who performed PAR in Moerwijk in April 2021. This list consisted of clients (n=3), healthcare professionals (n=9), participatory action researchers (n=2) and residents of Moerwijk (n=6). These possible participants were direct or indirect involved in the PAR in Moerwijk, The Hague. Unfortunately, ten out of these twenty people responded. One client was not reachable, the other stopped the interview (this reason is not given in this report relating to privacy). Six healthcare professionals did not participate due to a change in job (a year had passed since the PAR), a busy schedule or others did not respond via email or telephone. Two residents were not able to participate as well due to personal circumstances. This gave a total of ten participants which consisted of a mix of residents (n=4) and key stakeholders (n=6) that responded and gave their consent to participate in this study. In total, ten interviews were conducted. The interviews had a duration between 25 and 60 minutes. All interviews were included and 9 of them were recorded. The not recorded interview was written down by the researcher, the participant did not want to be recorded due to privacy. The characteristics of the participants are shown in table 2.

Table 2: characteristics of participants

Participant	**Role**	**Involvement PAR**	**Organization**
P1	Participatory Action Researcher	Leading the PAR	SevenSenses
P2	Community builder	Participated in PAR	Municipality The Hague
P3	Participatory Action Researcher	Minimal involvement	SevenSenses
P4	Resident	Participated in PAR	-
P5	District manager	Connected SevenSenses with healthcare professionals	Municipality The Hague
P6	Healthcare professional	Participated in PAR	HADOKS (healthcare organization)
P7	Resident	Went to one meeting	-
P8	Resident	Participated in PAR	-
P9	Resident	Participated in PAR	-
P10	Client	As client, indirect involved	GGD Haaglanden

In figure 5, the results are shown in relation to the theoretical model which is used for this research. This figure will guide the results section and emerging concepts are shown that are important for collaboration in this particular system context, which is health promotion in a low-SES neighborhood. The three dimensions communication, cooperation and coordination are important for fostering collaboration. As stated in the research question, the concepts are directly or indirectly linked to how the system can foster collaboration between residents and key stakeholders by using PAR as a tool. It is good to keep in mind while reading the results, that all questions during the interviews were related to collaboration in order to improve health in the neighborhood, Moerwijk.

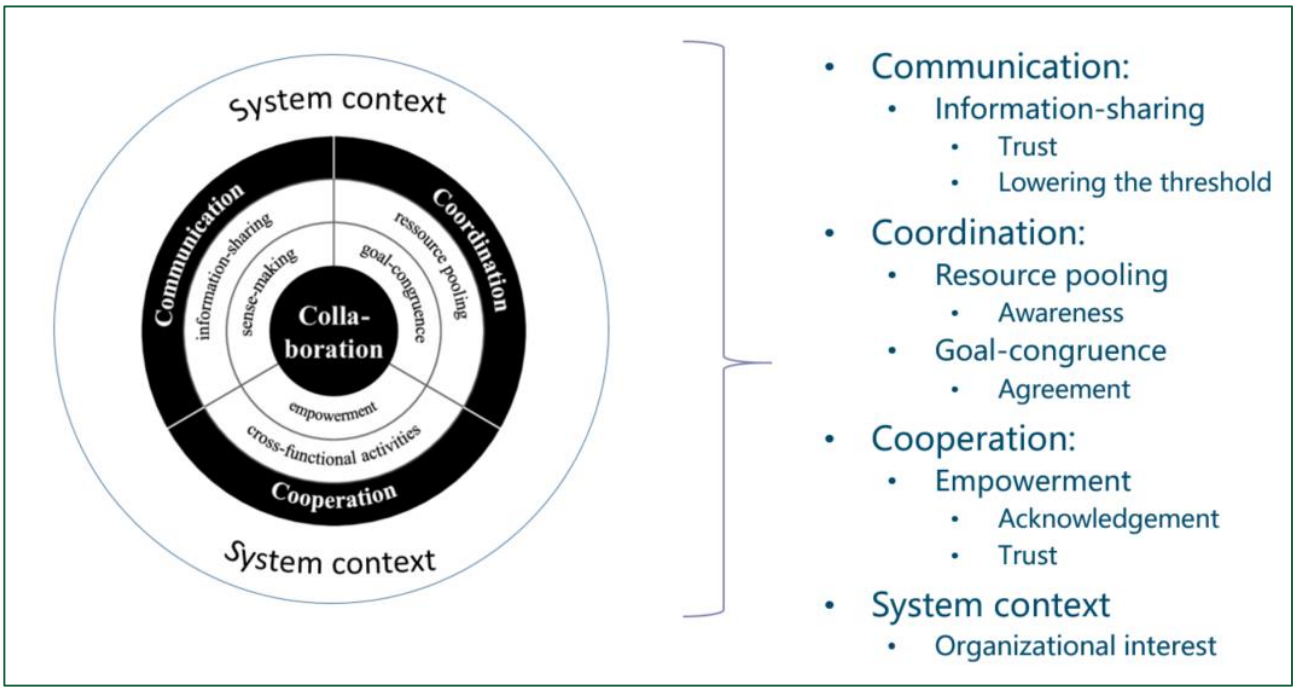

Figure 5: Results established in this research in relation to the theoretical model

5.1 Communication

The model consist of three dimensions (figure 4). One of them is communication which is divided into information sharing and sense-making. Information sharing is distributing information among stakeholders and residents, whereas sense-making entails that information is well interpreted to understand the complex problem.

SQ1: ***How can the system foster <u>communication</u> between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?***

<u>Information sharing: Trust and lowering the threshold</u>

Fostering communication in relation to PAR was explored during the interviews. It is seen that the residents were quite clear that communication in general between stakeholders and residents is still in need of improvement. The main themes that emerged from the data was **trust and lowering the threshold** regarding information sharing with healthcare professionals and key stakeholders. Residents were quite clear that there was more activity in the neighborhood as well by the healthcare professionals as by the municipality after the PAR. However, they still felt there is room for improvement and sometimes they mentioned it is still difficult to reach out to professionals in the neighborhood.

> **P4 (resident):** *"Communication is difficult, I think this has to do with trust."*
>
> **P9 (resident):** *"They [professionals] run into mistrust of residents. But that is not out of reason if you have been used for years as a drain. Residents now feel: first see, then believe."*
>
> **P8** mentioned that information sharing between residents themselves had improved after PAR.

However, P1 (researcher) added to this:

> **P1 (researcher):** *"Professionals struggle to get in contact with residents. I would say: "go to the neighborhood and talk to people". But there seems to be a weird threshold that professionals experience when it comes to communicating with the neighborhood."*

The both researchers (**P1** and **P3**) mentioned that they saw differences in communicating between residents and key stakeholders after the PAR but had to acknowledge that it is difficult to connect this solely to the PAR of last year. The client mentioned:

> **P10 (client):** *"It resulted in the fact that we have a mobile prevention team that goes to community centers and to places where residents are have a conversation with them. This is not solely due to the PAR but it definitely had some sort of influence."*

The professionals mentioned that professionals struggle to find the best way to do this. **P2** (community builder) mentioned that not all professionals feel the freedom to reach out to residents by their organization. However, **P5** (district manager) acknowledged that it is even more complex, he mentioned that language barriers are great. There are 158 nationalities in The Hague whereof most diverse nationalities are located in Moerwijk.

Nonetheless, key stakeholders confirmed that PAR could play a role in further improvement of communication by increasing trust and lowering the threshold to reach out between residents and key stakeholders. **P2** expressed her needs in regards to information:

> **P2** (community builder): *"What I would need, is a list with a clear overview of what has been retrieved from the focus groups [part of the PAR process]. What has already been done on this list and what is still open? Do we find it important to investigate?"*

Sense-making:

The factor sense-making was less seen in the interviews, but **P2** (community builder) explained that to understand each other PAR could be a tool but not all people could understand PAR, so P2 would propose to make use of other methods that would fit better.

Summary communication dimension

The system can foster communication if it is able to advocate **trust** and **lower the threshold** between residents and stakeholders in order to foster collaboration. Regarding trust, residents were clear that there was still mistrust between residents and stakeholders but it had improved due to PAR. Moreover, PAR contributed to lowering the threshold between residents and stakeholders to foster communication.

5.2 Coordination

The second dimension of the model is coordination, it implies managing activities and available resources. Resource-pooling and goal congruence are the two factors important for coordination. Resource-pooling is allocating the necessary information, equipment and human resources in order to reach the shared goal. Goal congruence implies that there is mutual agreement and understanding of the shared goal by all stakeholders collaborating.

SQ2: ***How can the system foster coordination between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?***

Resource pooling: awareness about the needed tools

When looking at the factor resource-pooling it seems clear, that all participants acknowledge that they do not have and/or not have enough tools to foster collaboration between residents and key stakeholders.
Others, among them **P4** (resident) saw there was more awareness in the neighborhood after the PAR. Adding to this, **P2** (community builder) mentioned that before having the resources for coordination, the

stakeholders and residents should have more awareness about this topic (promoting health) in order to collaborate together.

> **P5 (district manager):** *"I think that they have it [the resources] in their mind but in practice it is different and therein lies the tension. PAR could play a role in this."*

> **P6 (healthcare professional):** *"We are not there yet, we just started communicating. First, we have to map what we have to offer on the basis of what the residents need."*

Moreover, **P4** (resident) and **P10** (client) pointed out that budget is also an important part of resource-pooling. P4 emphasized that the PAR had interesting outcomes which could be built on but due to budget the study did not continue. However, both **P4**, **P8** and **P9** (all residents) showed that due to more awareness after the PAR, more had been organized in the local community center. Only **P1** verified this as well, the rest of the stakeholders did not mention higher activity levels in the community center.

At last, **P6** pointed out:

> **P6 (healthcare professional):** *"Nothing has actually changed in peoples' health [after the PAR]. But there is awareness, more awareness in community-up thinking and working. I think that this process has been very valuable."*

Goal congruence: agreement of shared goal

The participants were quite divided regarding the mutual agreement and understanding of the shared goal which in this context is promoting health. Some agreed that this was clear for everyone participating in the PAR, where others thought there were differences between residents and other stakeholders. Objectively, the participants who elaborated on the fact that everyone had the same shared goal actually showed that they all had different goals. For example, P4 acknowledged they had the same goal which was visibility of professionals. But P7 mentioned that the same goal was to explore healthcare within the neighborhood. However, in essence (promoting health in the neighborhood) it is the same. **P1** showed that she and the client had also a different goal:

> **P1 (researcher):** *"My goal was to see how I can connect the system world and the "living world" with each other. But the client wanted to see how health care that already existed, could be connected to the neighborhood. We gave it a twist."*

> **P4 (resident):** *"Some people were talking about making things visible that are already there. Others, wanted the threshold to be lowered. So, everyone had a different goal."*

Residents as well as stakeholders acknowledged by using PAR, the goal was more aligned.

> **P6 (healthcare professional):** *"The changes we envision, are now coordinated with both the residents and the professionals. I notice this is really valuable because you have more support."*

Summary coordination

Within the coordination dimension two concepts emerged: **awareness** and **agreement**. It is shown that to foster coordination these two concepts are able to be improved by PAR. Awareness about the needed tool was an important concept since all participants mentioned they did not have these tools. However, PAR showed them awareness on what they should need. Additionally, agreement about the shared goal was seen as another factor to foster coordination by using PAR as a tool. Participants mentioned that they did not always agreed but PAR contributed to a more aligned goal between residents and stakeholders.

5.3 Cooperation

The third dimension proposed in the model is cooperation which indicates that all stakeholders understand the shared goal and work together to reach this goal. Two important factors for this dimension are more behavioral factors such as empowerment and doing cross-functional activities (cooperation across different levels and functions). Empowerment is achieved by making shared decisions and creating ownership.

SQ3: ***How can the system foster cooperation between residents and key stakeholders in order to move towards a healthy neighborhood in a low-SES neighborhood by using PAR as a tool?***

Empowerment: trust and acknowledgement

Both residents and key stakeholders recognized that there was more acknowledgement for residents after the PAR. Residents were more empowered and stakeholders knew how to approach these residents when in needs of their advice regarding a healthier neighborhood. Acknowledgement played an important role for residents. But stakeholders saw the difference as well.

> **P2 (community builder):** *"Now we get in touch with each other more easily [resident and stakeholders]. More residents or residents' organizations are even getting paid. They are taken more seriously and they are discussing more frequently with each other."*

> **P8 (resident):** "It [cooperation] is now better, before it was not. More attention is being paid to the neighborhood, it is more visible to professionals. For me, I did not know what happened in the neighborhood but now I see clearly that the professionals are more visible in the neighborhood. I feel heard, PAR certainly helped.

> **P9 (resident):** *"It [PAR] creates ownership. Before, the municipality devised a policy plan and organized a meeting and told us about it and that's it. You are not involved in the process, it's a shame. But with PAR the residents are thinking of a plan themselves, the feeling: I belong!"*

Trust was again an important factor to foster cooperation within empowerment. Especially **P2** (community builder**, P4** (resident) and **P9** (resident) pointed out that trust is also an important part in empowerment for collaboration between residents and key stakeholders. **P10** shared:

> **P10 (client):** *"Because by being there more often, and by actually getting things done, there is more trust. Later on, they [residents] told us: you keep coming back, this gives us trust."*

However, **P9** still feels that trust is still lacking between residents and key stakeholders.

> **P9 (resident):** *"In the past years trust between residents and professionals decreased. Professionals now acknowledge this. The bond needs to be healed, if that is not done, nothing will happen in the neighborhood. Yes, a bridge is being build, but this is taking a long time because the trust is lacking."*

Cross-functional activities:

This factor was only seen during the PAR. It implies that different job functions and/or expertise come together to collaborate. However, it is part of the PAR process to collaborate together which has been done. But after the PAR this factor was not seen.

Summary cooperation

Within the cooperation dimension within the factor empowerment, two concepts emerged: **trust** and **acknowledgement**. It is shown that to foster cooperation these two concepts are able to be improved by PAR. Namely the residents acknowledged that acknowledgement increased due to the use of PAR as a tool.

They felt that they were taken more seriously which also resulted in an increased trust. Cooperation is about working towards the shared goal and participants mentioned that when you need to work towards that goal, trust between residents and stakeholders is a key element. In this particular context, in promoting health in a low-SES neighborhood, PAR contributed to these factors.

5.4 System context

Within this part of the theoretical model, the system context is the low-SES neighborhood Moerwijk in which PAR took place in April 2021. Within the system context, policies, organizations, the municipality and more could play a role. The emerging concepts that was seen was: **organizational interest**. In the case of the stakeholders they indicated that they had their own organization which has its own rules and policies. Due to this, they could not always foster collaboration with residents due to time constraints, policies or other barriers.

> **P2 (community builder):** *"What you see is that most people understand [that they should talk to residents], but they do not feel the freedom and space of their own organization to do this."*

> **P10 (client):** *"The professional is stuck in its own system. The professional get a certain amount of hours to do consultations. And if that is finished, then it is done. But this does not match the needs of the neighborhood."*

The residents too, felt that organizational interests were involved by the stakeholders. They want the stakeholders to go to the neighborhood and ask them what they want. They feel that that the stakeholders should be more visible in the neighborhood so they feel heard when it comes to their health.

6 Discussion

In this section the results will be elaborately explained in a broader context. Literature will be linked to the results and the results will be put in a real-world perspective. Next, the main findings are presented and limitations and strengths of this research explained. At last, the conclusion will consist of the findings that answer the main question of this research.

6.1 Summary

This research has shown that there are different factors that are enablers in fostering collaboration between residents and key stakeholders in order to move towards a healthier neighborhood in a low-SES neighborhood by using PAR as a tool. To guide this study a collaboration model was used, this model consists of three dimensions: communication, coordination and cooperation. Each dimension had two factors guiding the dimension. As seen in the results section in figure 5, different factors emerged during the interviews that were seen to foster collaboration (regarding their health) between residents and stakeholders in a low-SES neighborhood by using PAR as a tool. It is shown that PAR could definitely contribute to the collaboration in order to improve health by bringing these different stakeholders together.

The communication dimension showed two concepts emerging: trust and lowering the threshold between residents and stakeholders. For both residents and stakeholders, trust is an important factor for communication and this could be improved due to PAR. Both empathized that without trust, communication was hindered. More importantly, residents were clear that there was still mistrust between residents and stakeholders which also resulted in a threshold between them. The concept lowering the threshold between residents and stakeholders was also frequently mentioned in the communication dimension. By lowering the threshold was implied by the participants that the stakeholders should go to the neighborhood and talk to

residents to gain information and to share information. The participants added to this that PAR played a role in lowering this threshold between residents and stakeholders. Next in SQ2, the coordination dimension showed two concepts as well: awareness about needed tools and agreement about the shared goal. Awareness was seen in the factor resource pooling which was about allocating the necessary information, equipment and human resources. All participants shared that they did not have enough tools to promote their health. But due to the PAR they had more awareness about the needed tools. Additionally, due to PAR there was more agreement about the shared goal. Lastly, SQ3 showed that for the cooperation dimension the factors trust and acknowledgement foster cooperation. Within the cooperation dimension trust was seen as a part in working towards the shared goal. In order to work together, the residents and stakeholders felt the need to trust each other before continuing to cooperate. As seen in figure 5, the behavioral factor empowerment within this dimension was related to acknowledgement. After the PAR, residents felt more acknowledged by stakeholders and acknowledgment is seen as another factor to foster coordination.

These five factors derived from the three dimensions: trust, lowering the threshold between residents and stakeholders, awareness, agreement and acknowledgement are able to foster collaboration in order to promote health in a low-SES neighborhood by using PAR as a tool. These three dimensions are all interrelated to each other, without communication there is no cooperation and vice versa. They are equally important to foster collaboration. Nonetheless, due to the semi-structured interviews another concept emerged: organizational interests. This concept was seen as a more system context, participants were not really able to influence this concept.

6.2 Main findings

PAR is known for its collaborative and participatory approach, therefore it would be obvious that this would be a successful tool to foster collaboration (Greenwood, Whyte & Harkavy, 1993). Nevertheless, in literature PAR is not yet acknowledged as a tool to foster and improve collaboration. Little to no research has been done on this particular topic. The results of this research have shown that PAR could definitely contribute to fostering collaboration in order to promote health in a low-SES neighborhood. One of these factors was more dominantly seen and emerged within two dimensions: trust. Findings in different articles elaborated that trust is an important factor for a successful collaboration. A higher level of trust results in a higher degree of collaboration which in turn contribute to a more successful collaboration (Bond-Barnard, Fletcher & Steyn, 2018).

Interestingly, sense-making was not seen during this research. Sense-making is interpreting the shared information within the communication dimension. This seems an important step as it processes the information that is given by all stakeholders involved. A possible explanation could be that since the researcher is the research instrument by doing the interviews, the researcher failed to dive deeper into this topic which may resulted in a flaw regarding the sense-making factor (Barrett, 2007). Another possible explanation may be that this factor is simply skipped and less relevant in this particular context. But the question remains why and cannot be accounted for in this research.

Putting these findings into a broader perspective, this research accentuated that PAR could be an effective tool to apply when it comes to fostering collaboration between stakeholders in order to promote health in a low-SES neighborhood. Besides being widely used in public health research in the past decades, PAR is widely used around the globe each in different contexts and systems such as the marine ecosystem, housing and sustainability (Baum, 2016; Eelderink, 2020). This emphasizes the possibilities and opportunities that comprise PAR as a tool. The findings indicate that PAR as a tool is able to promote certain factors to foster collaboration which may imply that these factors can be used in different contexts on how to foster collaboration. For example within organizations, municipalities and education where stakeholders could profit from a fruitful collaboration on multiple levels. The relevance of this research in science and society is

embedded in PAR itself, PAR serves as bridge between science and practice. This entails that during PAR, the PAR participants will form an initiative of their own to put into practice afterwards resulting in a fine line between science and society (Eelderink, 2020).

6.3 Strengths & limitations

One of the strengths of this research are the semi-structured interviews, in-depth exploration of the PAR and collaboration was given by the participants. Allowing other concepts to emerge during the interview resulting in rich data and a broad overview of the topic. Nonetheless, the interviewer guided the conversation along by the interview guide to maintain consistency. Another strength is the diversity of the participants, all relevant stakeholders who participated in the PAR were included. The varied from residents, researcher, healthcare professional to client which basically covers all relevant stakeholders in this particular context. Furthermore, the emerged factors established by this research are factors that are able to be improved. Therefore, these findings can be useful to improve PAR and to foster collaboration between residents and key stakeholders to move towards a healthier neighborhood. The findings of this study are insightful and helpful for researchers, residents and stakeholders whose goal is to improve health in a low-SES neighborhood.

Through this research relevant factors which are important for fostering collaboration have been identified. These factors were identified by using the collaboration model as a guidance. It is possible that other relevant factors are excluded or simply missed while using this model. However, the model gave guidance to this research. Another limitation is the research design. This research design is designed to be completed in a three-month time frame. This may result in some limitations due to time management. Another limitation is that there were only ten participants interviewed. This is because the PAR had been done in April 2021 which is a while ago. A list was provided by SevenSenses which contained 20 possible participants. However, a lot did not respond or already changed his/her job. So, in the future it is important to keep in mind that by assessing PAR as a tool, one should try to do it earlier. When you have more participants, you have more options for different methods, achieving triangulation. Unfortunately, this was not met during the lack of participants. Additionally, the results are less generalizable since only one neighborhood in the Netherlands is investigated. Adding to this, the group investigated is a more ‘active’ group in the neighborhood which could mean that other residents or stakeholders did not saw differences in collaboration or other topics.

6.4 Implications for future research

Future research opportunities include a mixed method design and adding focus groups. This could be done when more time is given. Benefits using a mixed method design could be a more in-depth and a more detailed description of the complex problem by mixing qualitative and quantitative data. A mixed method design will allow for triangulation, this may wider the breadth of the results (Triangulation, 2014). With focus groups people could feel more confident to share important information and it could be interesting to get these different perspective in the same room and observe the dialogue that unfolds (Eelderink, 2020). Using PAR as a tool is seen to be effective, however the PAR process could be further improved by investigating the factors that emerged from the data. Not all factors were fully successful, but participants were mostly enthused by the tool PAR. It is possible that these findings are more integrated in PAR, for example awareness about the needed tools. This factor could be implemented throughout the PAR process to foster collaboration between all stakeholders involved. So further improving PAR, focusing on these factors could result into a more effective and collaborative process in this particular context.

6.5 Conclusion

In conclusion, this research showed that PAR could definitely be a tool to foster collaboration in order to promote health in a low-SES neighborhood. The findings of this research could be applicable to different contexts where collaborative practices are essential for success. The different factors that contributed to fostering collaboration may be integrated in the PAR process to improve collaboration during PAR. By showing that PAR is able to foster collaboration in order to promote health, we could be one step closer in bringing science and society together. A multiple case study would be recommended for future research to improve validity and reliability.

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9 Annex

9.1 Interview guide English

Topics:

First of all, the interviewer will thank the interviewee for participating in my research and for signing the informed consent. Then, the researcher will introduce herself and will give an introduction about research and after that the interviewee will give an introduction about him- or herself. The interview will have a duration of approximately 30 to 60 minutes and will be recorded with consent of the interviewee.

Topic 1: General introduction interviewee

- Can you tell me about yourself?
- What is your function? (if resident, what do you do in your daily life?)
- For which organization do you work?

Topic 2: General introduction PAR

- Can you tell me more about the PAR that took place in April 2021?
- What happened during this PAR process?
- How did you feel about the PAR?
- What happened after the PAR?
- What happened in regard to your health?
- What happened to the neighborhood during PAR?
- What happened to the neighborhood after PAR?

Topic 3: Communication

- Can you elaborate about sharing information between residents and stakeholders?
    - What went well?
    - What might hamper?
- Did something change after the PAR?
- Did you saw a difference?
- Can you elaborate on how residents and stakeholders are communicating?
    - What went well?
    - What might hamper?
- Did PAR contribute to this?
    - In which way?
- What do you think is needed to improve communication between residents and stakeholders?

Topic 4: Coordination

- Do you think that the shared goal (what we just discussed) still exists?
    - Is the neighborhood still aware of this?
    - Why do you think this? / What is happening now?
- Do you think the tools and information that are needed to continue to promote health, that these are available?
    - What do you need?
    - Did PAR play a role in this?

- Can PAR still play a role in this?

Topic 5: Cooperation

- Do you think that everyone wants to cooperate? Both residents and stakeholders?
  - why is that?
  - Could this be a result of the PAR?
- Do you think that during the PAR that the goal was clear for everyone?
- What is the goal of the neighborhood at the moment in relation to the PAR?
- Do you think everyone has the same goal?
  - What about residents and professionals?

Topic 6: Collaboration

- What do you think about the collaboration between residents and stakeholders?
- What do you think could be improved?

Thank you!

- Do you have additional comments?
- Are there other things I could have missed?
- Do you have questions for me?

9.2 Interview guide in Dutch

9.2.1 For residents

Heel erg bedankt dat u met mij op gesprek wilt. Het gesprek duurt ongeveer een half uur tot een uur. Mag ik het opnemen?

Nog wat meer info over mij: Estella, 25 jaar, woon in Amsterdam, studierichting onderzoek/beleid/management in de zorg. Voor mijn afstuderen loop ik stage bij SevenSenses. Deze stage richt zich op het terugblikken/evalueren van het actieonderzoek dat vorig jaar plaatsvond in Moerwijk (uw wijk). Ook wil ik ontdekken hoe de samenwerking gaat tussen bewoners en zorgprofessionals sinds het actieonderzoek.

Topic 1: algemene info

- Zou u wat meer over uzelf kunnen vertellen?
  - Bewoner: wat doet u in het dagelijks leven?
- Wat doet u zoal in de wijk?

Topic 2: PAR

Vorig jaar is natuurlijk het actieonderzoek gedaan. Wat vond u van het actieonderzoek?

- Wat is/was in uw ogen het doel van het actieonderzoek van vorig jaar?
  - Meer specifieker? Wat wil je weten?

- Wat is er tijdens dit proces gebeurd? Wat hebben jullie gedaan?
- Wat vond je van het actieonderzoek?
- Wat is er gebeurd na het actieonderzoek? Wat heb jij gedaan na het actieonderzoek?
- Wat is er gebeurd met de/uw gezondheid na het actieonderzoek?
- Heeft de wijk iets gemerkt van het actieonderzoek **tijdens** het actieonderzoek?
- Wat is er met de wijk gebeurd **na** het actieonderzoek?
- Wat vond u leuk aan het actieonderzoek?
- Wat vond u minder leuk?

Topic 3: communicatie & samenwerking

- Hoe gaat de samenwerking binnen de wijk?
    - En hoe? Wat gaat daarin goed? Wat gaat minder goed?
    - Hoe was het voor het actieonderzoek? Heeft het actieonderzoek hieraan bijgedragen?
- Hoe gaat het informatie delen tussen bewoners?
- Wordt er meer (informatie) gedeeld tussen bewoners sinds het actieonderzoek?
- En tussen bewoners en zorgprofessionals?
- Hoe gaat dat nu (het informatie delen)?
- Hoe gaat het met het communiceren tussen bewoners?
- Hoe gaat het met het communiceren tussen bewoners en professionals?
    - Wat gaat daarin goed?
    - Waar loopt u tegenaan?
- Wat is er nodig voor een betere communicatie?
    - Speelt het actieonderzoek hier een rol in?
    - Op welke manier?

Topic 4: coördineren

- Heeft u het idee dat na het actieonderzoek, het doel waar we het net over hadden, is blijven bestaan? Heeft u het idee dat de wijk hier nog mee bezig is?
    - Waarom denkt u dat? / Wat gebeurt er nu?
- Heeft u het idee dat de benodigdheden en informatie die hiervoor nodig zijn, dat die beschikbaar zijn?

- Wat zou hiervoor nodig zijn?
    - Kan het actieonderzoek hier een rol in spelen?

Topic 5: medewerking

- Heeft u het idee dat iedereen gewilliger is om zijn medewerking?
    - Hoe komt dat?
    - te geven als resultaat van het actieonderzoek)?
- Heeft u het idee dat het doel van het actieonderzoek voor iedereen duidelijk was?
- Wat is het doel van de wijk nu (mbt het actieonderzoek)?
- (.. we hadden het net over het doel van het actieonderzoek..) Denkt u dat iedereen hetzelfde doel heeft?
    - Tussen professional en bewoners?
    - En bewoners met elkaar en de professionals met elkaar)?

Waar loop je tegenaan qua systeem: gemeente, zorginstellingen?

Als laatste:

- Hoe vindt u de samenwerking tussen bewoner en zorgprofessional gaan?
- En wat zou er beter kunnen?

Afsluiting

- Heeft u nog aanvullende opmerkingen?
- Wilt u nog iets kwijt?
- Heeft u nog vragen voor mij?

9.2.2 For stakeholders

Heel erg bedankt dat u met mij op gesprek wilt. Het gesprek duurt ongeveer een half uur tot een uur. Mag ik het opnemen?

Nog wat meer info over mij: Estella, 25 jaar, woon in Amsterdam, studierichting onderzoek/beleid/management in de zorg. Voor mijn afstuderen loop ik stage bij SevenSenses. Deze stage richt zich op het terugblikken/evalueren van het actieonderzoek dat vorig jaar plaatsvond in Moerwijk, dat ging over gezondheidspreventie vanuit de Gezond Gelukkig DH. Ook wil ik ontdekken hoe de samenwerking gaat tussen bewoners en zorgprofessionals sinds het actieonderzoek.

Topic 1: algemene info

- Zou u wat meer over uzelf kunnen vertellen?
- Wat is uw functie?

- Voor welke organisatie werkt u?
- Wat doet u zoal in de wijk?

Topic 2: PAR

- Hoe was u betrokken bij het actieonderzoek?
- Wat is/was in uw ogen het doel van het actieonderzoek van vorig jaar?
    - Hoe vond je het actieonderzoek gaan?
- Wat is er tijdens dit proces gebeurd? Wat hebben jullie gedaan?
- Wat vond je van het actieonderzoek?
- Wat is er gebeurd na het actieonderzoek? Wat heb jij gedaan na het actieonderzoek?
- Wat is er gebeurd met de gezondheid na het actieonderzoek?
- Heeft de wijk iets gemerkt van het actieonderzoek **tijdens** het actieonderzoek?
- Wat is er met de wijk gebeurd **na** het actieonderzoek?

Topic 3: communicatie & samenwerking

- Hoe is de samenwerking nu in de wijk?
- Is er een samenwerking tot stand gekomen binnen de wijk door het actieonderzoek? En hoe?
- Hoe gaat het informatie delen nu tussen prof?
    - Wordt er meer (informatie) gedeeld tussen professionals door actieonderzoek?
- En tussen bewoners en zorgprofessionals?
- Hoe gaat dat nu (het informatie delen)?
- Hoe gaat het met het communiceren tussen professionals)?
- Hoe gaat het met het communiceren tussen bewoners en professionals?
    - Wat gaat daarin goed?
    - Waar loopt u tegenaan?
- Wat is er nodig voor een betere communicatie?
    - Speelt het actieonderzoek hier een rol in?
    - Op welke manier?
- Systeem waar je tegenaan loopt?

Topic 4: coördineren

- Heeft u het idee dat na het actieonderzoek, het doel waar we het net over hadden, is blijven bestaan? Heeft u het idee dat de wijk hier nog mee bezig is?
    - Waarom denkt u dat? / Wat gebeurd er nu?
- Heeft u het idee dat de benodigdheden en informatie die hiervoor nodig zijn, dat die beschikbaar zijn?
- Zou een samenwerking tussen bewoners en zorgprofessionals hiermee kunnen helpen?
    - Op welke manier denkt u?
    - Kan het actieonderzoek hier een rol in spelen?
- Liep je weleens ergens tegenaan binnen de organisatie of op andere vlakken?

Topic 5: medewerking

- Heeft u het idee dat iedereen gewilliger is om zijn medewerking te geven als resultaat van het actieonderzoek)?
- Heeft u het idee dat het doel van het actieonderzoek voor iedereen duidelijk was?
- Wat is het doel van de wijk nu (mbt het actieonderzoek)?

- (.. we hadden het net over het doel van het actieonderzoek..) Denkt u dat iedereen hetzelfde doel heeft?
    - Tussen professional en bewoners?
    - En bewoners met elkaar en de professionals met elkaar)?

Als laatste:

- Hoe vindt u de samenwerking tussen bewoner en zorgprofessional gaan?
- En wat zou er beter kunnen?

Afsluiting

- Heeft u nog aanvullende opmerkingen?
- Wilt u nog iets kwijt?
- Heeft u nog vragen voor mij?

9.3 Informed consent

Beste,

Bedankt dat u wilt deelnemen aan mijn onderzoek naar de evaluatie van het actieonderzoek. Voordat er gestart kan worden met het gesprek is het belangrijk uw toestemming te hebben voor de volgende punten:

- Ik weet dat meedoen aan het onderzoek vrijwillig is.
- Ik weet dat er zorgvuldig wordt omgegaan met mijn gegevens en dat deze geheel worden geanonimiseerd.
- Ik geef toestemming voor een audio opname tijdens het gesprek ten behoeve van het onderzoek.
- Ik heb begrepen dat ik op ieder moment kan stoppen met deelname aan het onderzoek. Ik hoef geen reden te geven als ik wil stoppen met het onderzoek. Er zijn geen consequenties voor mij wanneer ik stop met het onderzoek.
- Ik geef toestemming dat na het onderzoek de gecodeerde onderzoeksgegevens voor ongeveer 5-10 jaar worden bewaard.
- Ik geef toestemming om de gegevens die tijdens dit onderzoek worden verzameld ook voor vervolgonderzoek op het gebied van gezondheidszorg kan worden gebruikt.
- Ik wil meedoen aan dit onderzoek.

Kunt u deze punten met een ‘ja’ beantwoorden dan verzoek ik u vriendelijk het formulier (digitaal) te ondertekenen en naar mij (Estella Posthuma, estella.posthuma@seven-senses.nu) op te sturen.

Doel onderzoek

In samenwerking met SevenSenses en de Vrije Universiteit Amsterdam wordt er onderzoek gedaan naar de samenwerking tussen bewoner en zorgprofessional in relatie tot het actieonderzoek dat is uitgevoerd door SevenSenses in de wijk Moerwijk, Den Haag. Dit onderzoek richt zich op het terugblikken van dit actieonderzoek.

X	X	X
Naam deelnemer	**Handtekening deelnemer**	**Datum (dd-mm-jjjj)**
X	X	X
Naam onderzoeker	**Handtekening onderzoeker**	**Datum (dd-mm-jjjj)**

Voor verder vragen en/of opmerkingen kunt u mij benaderen via de email of telefoon.
Hopende u voldoende geïnformeerd te hebben,
Met vriendelijke groet,
Estella Posthuma
estella.posthuma@seven-senses.nu
06-53420121

9.4 Codebook

Categories		Theme	Concepts	Definition
Collaboration	Communication	Information sharing	Trust	Trust in relation to communication and sharing information
			Lowering the threshold	
		Sense-making	x	When shared information was interpreted among different stakeholders
	Coordination	Resource pooling	Awareness	Awareness about needed tools in order to promote health
		Goal congruence	Agreement	Agreement and understanding of shared goal between stakeholders
	Cooperation	Empowerment	Trust	Trust in relation to empowerment and working towards the shared goal togehter
			Acknowledgement	Participants felt acknowledged during cooperation together
		Cross functional activities	x	When different expertise or different job functions come together to collaborate
	System context	System	Organizational interests	When the mission and vision of organization differs from what the participants want or feel is needed

9.5 Research planning

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Research Design																				

Preparing Data Collection																			
Data collection																			
Data analysis																			
Writing Report																			

9.6 Data Management Plan

Your contact details

Name: Estella Posthuma
Address: John Blankensteinstraat 185B, Amsterdam, 1095MB
Telephone: 0653420121
Email: e.c.c.posthuma@student.vu.nl
University: Vrije Universiteit Amsterdam
Faculty/Institute: Faculty of Science
Department/Group: Management, Policy Analysis & Entrepreneurship in Health Sciences

Please list the partner organisations involved in this project and indicate which organisation has the lead

Vrije Universiteit Amsterdam (VU): Academic organization/university of primary researcher. An appointed supervisor from the VU is in charge of scheduling intervision meetings throughout the research process. The VU supervisor provides feedback to the researcher.
Seven Senses: On-site supervision is conducted through Seven Senses. Also, data storage is done through their data storage plan.

Consulted data management expert

N/A

1. Data description

Please specify the origin of the data: will new data be collected or produced and/or will existing data be re-used? If you re-use data, what is their source?

New data will be collected by the researcher. No data will be re-used.

How will you collect/access the data?

The data will be collected through semi structured interviews.

Data collection from interviews via face-to-face meeting or online via an online video call like Zoom.
Data is recorded from using the researcher's personal laptop.
Data transcribed with the assistance of amberscript software.
Data is coded using Atlas.ti software.

Describe your data assets at each stage during the research process. In which format is the data at this stage? Also indicate a rough estimation of the volume of the data assets.

Interviews:
Raw data will be accessed through audio files collected on the telephone or via Zoom.
Processed data will be accessed after transcription in a word format.
Analyzed data after being coded, to a PDF format.
Document-analysis:
Raw data will be derived from meetings in a word document.
Processed data, data is anonymous.
Analyzed data after being coded, to a PDF format.

2. Legal and ethical requirements

Are there any ethical issues that should be addressed by an ethical review board?

- No

The participants of the semi structured interviews will fill in an informed consent.

Will you use animals for experimental or scientific purposes in your research project?

- No

Please list the applicable Codes of Conduct for your research project

Next to the Dutch and EU legislation, it is important to follow the VSNU Netherlands Code of Conduct for Research Integrity but also the policies of the VU and the Faculty of Science. The research project must comply with 'The General Data Protection Regulation' for the EU.
The VSNU Code of Conduct in the Netherlands also needs to be fulfilled to ensure research integrity. The Code emphasize five main principles: Honesty, Scrupulousness, Transparency, Independence, and Responsibility.

What other legislation is applicable to your research project? Please describe.

N/A

3. Storage and back-up during the research process

What is the security level needed for your project?

Privacy: low
Availability: medium
Integrity: High
Confidentiality: low

What measures will you take to secure and protect data during the research process? Please describe, for your data assets, how you will ensure data security and who has authorization to access the asset.

Raw data
Processed data

Acces: onsite Supervisors (Madelon Eelderink & Evert Jan van Hasselt) and researcher (me).

Is it necessary to transfer the (physical or digital) data assets to other locations or research partners? If yes, please describe how you secure the file transfer.

No

Please describe, for your data assets, where and how you will store and back them up during the research process.

The data will be stored in a secure folder in Dropbox only accessible for three people.

4. Data sharing and long-term preservation

In which digital repository (or data archive) will you archive your data? Please provide a name and link.

Dropbox.

What is the persistent identifier (e.g. DOI-code) that refers to the dataset?

N/A

In which online catalogue or web portal will you register your data assets? Please provide a description and a link.

N/A

Are there restrictions to data sharing? If yes, please specify the reasons and list the data assets you do not wish to share publicly.

N/A

When will you share the data (e.g. immediately after completion of the project, or after an embargo period)? If not immediately, please specify the reasons.

Immediately after completion of the project.

Please indicate the license and/ or terms of use under which you share your data.

N/A

For how long will the data be available in the archive/ repository?

At least five years.

Will the research publication resulting from this research project be openly accessible?

Yes.

5. Documentation and data quality

How will you document your data?

It will be documented via codebooks. But also field notes are taken during interviews.

Will you follow a specific metadata standard? If yes, please provide a name and link.

If there are no standards in your discipline, describe what metadata will be created and how.

No. Metadata will be created using the format of: data stage (raw, processed, analysed)_date_file type (transcript, consent, coding) _participantID (randomized)_version number

Will you use standard vocabulary for all data types present in your dataset? If not, will you provide mapping to more commonly used ontologies (naming conventions)?

Data will be mapped into themes and categories derived of the conceptual framework

What methods or software tools are needed to access and use your data?

Microsoft Office and Atlas ti.

Will you take measures to ensure data quality? Please describe these, if applicable.

6. Data management responsibilities and resources

Who will be responsible for management of the data assets after completion of the project (e.g. the project lead/ dedicated data manager/ department head)?

Name: Madelon Eelderink
Function: Founder of Seven Senses and Participatory Action Researcher
Faculty/ Institution: Sevens Senses Institute
Department/Group: -

What resources (for example financial and time) will be dedicated to research data management? Please estimate their cost.

The storage on Dropbox is for free.