

How Governance Influences Collaboration Between Scientific and Non-Scientific Stakeholders in Implementing and Evaluating Complex Interventions Regarding Health Issues

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Abstract

Health problems affect everyone but people with a lower SES are more affected. Health problems can be addressed on different levels, however to target health problems efficiently it might be useful to target neighbourhoods where people with a lower SES live. This can be done via interventions where it is necessary to form a collaboration between scientific and non-scientific stakeholders. These kind of collaborations are new and not much research had been done. This research uses the theory of Governance from Hudson, et al. (1999) to research these kind of collaborations. In order to do so interventions that use these kind of collaborations in Overvecht are being used as a sort of case study. Different stakeholders with either a scientific or non-scientific background have been interviewed to get their perspective on these collaborations. Semi-structured interviews have been used that have been structured in accordance with the most relevant concept from the theory of governance: task division, conflict, legitimate basis for collaboration, collaborative capacity, shared vision and trust. These concept have been used to answer the following research question: “Which factors as specified in the Hudson-framework on governance play a role in the collaboration process between scientific and non-scientific stakeholders?” All the factors from the theory of governance play a role in the collaboration process. Most in accordance with the theory from Hudson, et al. (1999). This research found that governance as a concept can be used to investigate these kind of collaborations, but also expended on the existing theory to make it more fitting to be used in social sciences.

Introduction

Problem statement

Health issues affect everyone in the society and have different causes, for example genetical factors or environmental hazards (Rehfuess and Bartram, 2014; Briggs, 2008; Raad voor Volksgezondheid & Samenleving (RVS), 2020). The way people are affected by these causes depends partly on their social-economic status (SES) (CBS, 2017; Knoop and van den Brakel, 2010; Brown, et al., 2019). People with a lower SES generally have a lower level of income and a lower level of education and this can affect their health outcome in a negative way (Knoop and van den Brakel, 2010; Brown, et al., 2019; Smith and Petticrew, 2010). In the Netherlands people with a lower SES live six years less than people with a higher SES (Pharos, 2019 (1)). People with a lower SES also live fifteen years in less good health than people with a higher SES and are more prone to risk factors that deteriorates their health even more, such as being in debt, social exclusion and living in bad neighbourhoods (Pharos, 2019 (1); RVS, 2020; Smith and Petticrew, 2010). Therefore it is necessary to address health issues amongst people with a lower SES.

A way to address health issues is via interventions. Interventions can target either the individual, the environment or both (Rehfuess and Bartram, 2014; Brown, et al., 2019). People with a similar SES tend to live in the same kind of neighbourhoods, therefore targeting interventions at certain neighbourhoods where people with a lower level of SES live might be more effective (Komro, et al. n.d.; Brown, et al., 2019; Woulfe, et al. 2010; MacQueen, et al. 2001). In order to target environmental factors in a neighbourhood multiple stakeholders have to be involved to improve for example housing, which makes these kind of interventions complex (Rehfuess and Bartram, 2014; RVS, 2020; Pharos, 2019 (2)).

The involvement of multiple stakeholders and their collaboration not only makes the implementation of those interventions more complex, but also the evaluation of those interventions (Karacabeyli, et al. 2018; Fazey, et al. 2014). Multiple stakeholders tend to formulate problems in different ways and also see different outcomes as effective (Fawcett, et al. 2010; Bennet, et al. 2018; Willis, et al. 2016). Furthermore the available funding for an intervention is most of the time also dependent on the effectiveness of an intervention (Karacabeyli, et al. 2018; Ling, 2016; Brown, et al., 2019). The evaluation of complex interventions is also complicated by the fact that those interventions take place in real time, in which changes in context can occur and increase unpredictability (Ling, 2016; Sallis, 2018;

Willis, et al. 2016). Therefore this collaboration in implementing and evaluating interventions where multiple stakeholders are involved is important in determining the effectiveness of those interventions.

So far there has not been done much research regarding the effect of collaboration between different stakeholders in the implementation and evaluation of environmental interventions (Sallis, 2018; Bennet, Glandon and Rasanathan, 2018; Karacabeyli, et al. 2018; Willis, et al. 2016; Fawcett, et al. 2010; Mâsse, et al. 2008). A bad collaboration might have a negative impact on effectiveness of an intervention or might result in a misunderstanding of outcomes of an intervention (Fawcett, et al. 2010). Furthermore whether stakeholders have a scientific background or not is important in the evaluation of interventions (Karacabeyli, et al.2018). Scientific evaluation has a different standard than non-scientific evaluation. Effects of complex interventions can also be measured on a group level instead of individual level, which asks for new methodologies of measurement (Smith and Petticrew, 2010).

The current study takes collaborations within the IGLO ('Iedereen een Gezonde LeefOmgeving') consortium as a case study. This consortium consists of members from academia as well as non-scientific partners received funding from ZonMw to evaluate interventions that focus on the renovation of social housing and improvement of green spaces in Overvecht.

Complex environmental interventions

What makes environmental interventions so complex? Diseases, genetical issues or other personal problems are usually tackled via the use of a medicine or a personal treatment program. These kind of interventions are classified as simple interventions because the intervention consists of a single treatment carried out by one or a small amount of specialists, usually with a similar disciplinary background (Rehfuess and Bartram, 2014). The effectiveness of these interventions are usually easy to evaluate since one effect has to be measured on only one person. Health issues deriving from environmental hazards or social-economic issues can usually be classified as environmental health issues and can be tackled via environmental interventions, such as anti-smoking campaigns that use poster or make certain areas unavailable to smoke in. These interventions are classified as complex interventions since environmental interventions usually tackle multiple problems at once, involving multiple stakeholders from different disciplinary backgrounds (Rehfuess and Bartram, 2014; Tarquinio, et al. 2014; Sallis, 2018). Furthermore, these stakeholders operate

in different systems and the interventions tend to tackle problems in different system as well (Karacabeyli, et al. 2018; Willis, et al. 2016; Ling, 2016; Brown, et al., 2019; Woulfe, et al. 2010). These kind of interventions most of the time have direct and indirect effects which can occur over large amount of time and consist of multiple components that act independently and interdependently (Willis, et al. 2016; RVS, 2020; Ling, 2016; Smith and Petticrew, 2010).

The large amount of time that these interventions usually take to produce further complicate things. The amount of time has for example some impact on the available funding for evaluating the intervention, since sometimes effect are only visible after evaluation has taken place (RVS, 2020; Ling, 2016; Brown, et al., 2019). In order to evaluate the effectiveness of the intervention in a scientific way funding is usually only available for a limited amount of time in which effects might not have taken place yet or are only visible in a limited way, which can have a negative impact on the available funding (Karacabeyl, et al. 2018; Ling, 2016; Brown, et al., 2019; Woulfe, et al. 2010). Furthermore some political changes might take place over time which can have either a positive or negative effect on the available funding for an intervention (Bennet, Glandon and Rasanathan, 2018; Brown, et al., 2019; Sallis, 2018). This makes it more difficult to evaluate the intervention.

Evaluating complex interventions

Scientific and non-scientific stakeholders have different methods of evaluating and tend to see different outcomes as effective (Tarquinio, et al. 2014; Karacabeyli, et al. 2018; Green, et al. 2001). In scientific evaluation the use of random control trials (RCTs) in an experimental setting is considered the golden standard. This form of evaluation is usually not possible in the evaluation of complex environmental interventions, since it is for example not possible to randomly assign members from two different neighbourhoods to either the group where the intervention takes place or the control group (Karacabeyl, et al. 2018). This would mean that people have to move between neighbourhoods and therefore a quasi-experimental design or randomised cluster trial are the only options left (Karacabeyl, et al. 2018; Tarquinio, et al. 2014; Sallis, 2018). Furthermore RCTs in experimental settings have an high internal validity and are used to prove causal effects by excluding external factors (Tarquinio, et al. 2014). These external factors are usually very important in determining the effectiveness of a complex environmental intervention and are an important aspect of the process evaluation of an intervention (Tarquinio, et al. 2014; Karacabeyl, et al. 2018; Byrne, 2013; Mandarano, 2008). Practical organisations tend to be more interested in the external validity as well (Tarquinio, et al. 2014). Furthermore are practical organisations more interested in the

efficacy of an intervention, whereas scientific research is more focused on the effects of an intervention (Bonell, et al. 2012; Tarquinio, et al. 2014).

To evaluate complex interventions roughly three different theoretical perspectives can be applied: reductionism, holism or pragmatic synthesis (Chen, 2016). Reductionism tries to break an intervention into different components and analyse the effectiveness of these components which happens in RCTs, this makes it harder to see the connection between different components (Ling, 2016; Chen, 2016; Bonell, et al. 2012). Holism sees the intervention as a system and tries to describe the effectiveness of the complexity and dynamics within this system, which happens in system analysis, this makes it harder to detect the mechanism of change (Willis, et al. 2016; Chen, 2016; Bonell, et al. 2012). Pragmatic synthesis falls in between the before mentioned two extremes of the spectrum and tries to use the strengths of reductionism and holism (Chen, 2016). Another important feature of pragmatic synthesis is that it allows for a bottom-up approach, allowing more input from practice communities, but this requires empowerment from the involves stakeholders (Green, et al. 2001; Rehfuss and Bartram, 2014; Ward, et al. 2018). Empowerment can be described as the ability to assertively play a part in the division of resources and dare to make a decision about this (Zimmerman, 1995, 2000).

Participatory research can help benefit evaluation where different stakeholders can be involved in formulating research questions and interpreting the findings for a specific context (Green, et al. 2001). This form of research can also help to thin the gap between academic research and community based research (Ward, et al. 2018). This might improve the external validity, but might hinder the internal validity as well although hindering the internal validity is not necessary. This also allows for tailoring with community for improvement and to map unintended consequences (Brown, et al., 2019; Craig, et al. 2013.) This is especially useful for interventions that evolve over time (Woulfe, et al. 2010).

Theoretical framework

A theoretical framework that can be used to describe how collaboration between different stakeholders works is the framework of governance from Hudson, et al. (1999) and can be considered as a basic framework for inter-agency collaboration that can be adjusted to specific situations. Collaboration refers in this case to a partnership between stakeholders and involves participation and empowerment of the involved parties (Huxham, et al. 2000). Participation refers to the inclusion of stakeholders in the decision making process, empowerment refers to

stakeholders taking a central role instead of working more on the side-line (Huxam, et al. 2000). In this case the joint objective is collaboration in evaluating and implementing complex interventions. Governance as a concept has been used in politics and management studies but can also be used in social sciences (Durose and Rummery, 2006; Woulfe, et al. 2010; Bennet, et al. 2018; Willis, et al. 2016; Fawcett, et al. 2010). Governance can be defined as the means to achieve direction, control and coordination of individuals and organizations with varying degrees of autonomy to advance joint objectives (Imperial, 2005). The relevant concepts from this framework will be discussed and linked to empirical findings to make them more relevant for this research.

Task division

The first concept of the framework of Hudson, et al. (1999) is task division. Scientific and non-scientific stakeholders may carry out similar or different tasks regarding the implementation and evaluation process. In the first case regarding similar tasks this can be considered as repetition, which is not desirable considering the intervention may already take plenty of time and efficiency is important also regarding the funding. If the involved stakeholders do different tasks, these might be complementary, but certain tasks might also get forgotten in which case there is omission. There can also be some sort of competition between the stakeholders in applying certain methods for evaluation which can be counterproductive between the stakeholders. A certain amount of competition can improve collaboration, but too much might hinder the process (Hudson, et al. 1999).

Conflict

Conflict and collaboration can be seen as two processes that might occur at the same time. Conflict is unavoidable in collaboration and can improve it actually by getting aware of different viewpoints that exist, but too much conflict can hurt the collaboration process and can lead to a competitive setting. Conflict mostly occurs because of a loss of autonomy from the involved stakeholders and a need to invest resources without being sure what the return of this investment is (Hudson, et al. 1999). Stakeholders also have to share credit for certain achievements (Fawcett, et al. 2010; Rycroft-Malone, 2016). The power needs to be shared between stakeholders in order to achieve good outcomes via an intervention, but this requires some concessions between the involved stakeholders (Willis, et al. 2016; Ward, et al. 2018). Less powerful stakeholders might feel a loss of autonomy because of this, since they have less resources to use to bargain their position and might be afraid to speak up (Ward, et al. 2018).

In order to make collaboration work regarding these aspects there needs to be flexibility in the use of joint agendas and resources to reach a symbiotic state (Imperial, 2005; Hudson, et al. 1999). Language and culture that involved stakeholders from different backgrounds need to be embedded (Huxam, et al. 2000). People from different disciplinary backgrounds tend to evaluate the effectiveness in different ways, but also exchange information in different ways (Smith and Petticrew, 2010; Fazey, et al., 2014; Rycroft-Malone, et al. 2016). Transferring scientific knowledge from one community to another can furthermore be difficult (o'Fallon and Deary, 2002; Willis, et al. 2016). This can be affected by the power structure between the stakeholders. On the one hand stakeholders have their independent roles and own expertise in the collaboration process, but since there is a need to collaborate the stakeholders are also dependent on each other to come to a correct evaluation and make use of the different expertise's that are available. This happens via the work relationships (Huxam, et al. 2000).

Legitimate basis for collaboration

Collaboration between stakeholders might be beneficial for in this case both the scientific and non-scientific stakeholders. The power needs to be shared between stakeholders in order to achieve good outcomes via an intervention, but this requires some concessions between the involved stakeholders (Willis, et al. 2016; Ward, et al. 2018). Less powerful stakeholders might feel a loss of autonomy because of this, since they have less resources to use to bargain their position and might be afraid to speak up (Ward, et al. 2018). It is important to identify the benefits for both parties in order to make the collaboration work and to form a network (Hudson, et al. 1999), such as sharing of resources (Huxam, et al. 2000). This network needs to consist of a variety of stakeholders necessary to reach the set goals but not be too big because the network might become unmanageable. The power needs to be shared between stakeholders in order to achieve good outcomes via an intervention, but this requires some concessions between the involved stakeholders (Willis, et al. 2016; Ward, et al. 2018). Less powerful stakeholders might feel a loss of autonomy because of this, since they have less resources to use to bargain their position and might be afraid to speak up (Ward, et al. 2018).

Collaborative capacity

The collaborative capacity describes the degree of change a collaborative relationship is able to sustain without any stakeholder losing a sense of security (Hudson, et al. 1999). This is also described as the dynamics of the collaboration (Huxam, et al. 2000). This is related to the earlier described possible loss of autonomy but also to the power balance between the

involved stakeholders which can result in conflicting values (Huxam, et al. 2000; Hudson, et al. 1999). The power needs to be shared between stakeholders in order to achieve good outcomes via an intervention, but this requires some concessions between the involved stakeholders (Willis, et al. 2016; Ward, et al. 2018). Less powerful stakeholders might feel a loss of autonomy because of this, since they have less resources to use to bargain their position and might be afraid to speak up (Ward, et al. 2018).

In order to increase the collaborative capacity it is necessary to create a collaborative identity which consists for four dimensions: the way stakeholders identify their role, certain boundaries between involved stakeholders, the way progress is defined by stakeholders and a sense of social purpose (Hudson, et al. 1999). The way stakeholders identify their role is especially important and is also described in the ambiguity as described by Huxam, et al. (2000), where it sometimes is not clear if involved stakeholders are in their role for their parent organization or the role of member of the collaboration.

Shared vision

A shared vision is considered a prerequisite for a successful collaboration and can be created before the collaboration starts or developed during the collaboration process (Hudson, et al. 1999; Imperial, 2005). This shared vision needs to consist of goals that can be attained and be a broad vision that is open to change instead of a blueprint. In this case the vision mostly needs to be formed on how to combine the different forms of knowledge from scientific and non-scientific stakeholders regarding evaluation and how resources can be shared (Imperial, 2005; Huxam, et al. 2000). The creation of shared goals and shared rules of engagement, can foster community and stakeholder engagement and the collaboration between those parties (Brown, et al., 2019; Bennet, et al. 2018; Fawcett, et al. 2010; Ward, et al. 2018).

Trust

Mistrust is considered as a primary barrier in collaboration, therefore it is important that stakeholders trust each other (Hudson, et al. 1999; Imperial, 2005). Stakeholders will economize on trust and invest in trust. Economizing on trust refers to the co-ordination of social interaction, this can be done via three ways: manipulation, pre-commitment and power. Manipulation encourages co-operation through self-interest. Pre-commitment refers to imposing constraint upon oneself in order to achieve a status of being trusted. Power refers to co-ordinating social expectations via the use or the threat of use of certain resources that a more powerful stakeholder possesses.

It is not yet clear how investment in trust can be developed or sustained, but it involves components of calculation of risk, an adherence to principled conduct and an investment in personal relationships (Hudson, et al. 1999). An appropriate calculation of risk refers to an internal calculation of external conditions and has subjective and objective elements. The outcome of the calculation depends on the situation and the person involved, but the returns need to be greater than the investments or possible alternatives in order to take the risk. An adherence to principled conduct refers to the necessity of trust in a situation where not all the actions and motives of the involved stakeholders are known, which is almost always the case and therefore trust is needed to collaborate. An investment in personal relationships refers to trust as a product of familiarity and friendship which implies some knowledge of each other and respect for each other. Collaboration is learned by collaborating with others (Imperial, 2005).

Based on this model and the findings from the empirical data it is expected that collaboration can be influenced in different ways. The tasks that different stakeholders have to do must be complementary in order to be useful, since multiple stakeholders are involved in an intervention to make use of their different expertise's. However stakeholders with different expertise's and either a scientific or non-scientific background use different terminology and different languages which can hinder the collaboration. The stakeholders can also formulate different goals or interpret outcomes and or goals differently and use different methods to measure outcomes. These all need to be adjusted to each other in a shared vision with shared goals which takes time to develop and may change during the process. This adjustment can however be influenced by the power different stakeholders have, this can be different per situation however so it is hard to tell beforehand if scientific or non-scientific stakeholders have more power in general. The shared vision can however be created by sharing certain resources and a feeling of the need to collaborate and the social purpose of the intervention. This can however be further hindered by the roles different stakeholders take for their parent company and the formed collaborative unit. One of the most important concepts needed to make sure the collaboration works is trust between the involved stakeholders.

Since research on this subject is scarce and the model of governance is heavily adjusted and does not show any concrete directions on how the different components influence collaboration this research tries to fill in that gap. Therefore the research question central in this research is: "Which factors as specified in the Hudson-framework on governance play a role in the collaboration process between scientific and non-scientific stakeholders?".

In order to answer this question the most important concepts from governance will be used as to form the interview guide and will serve as sub questions to answer the research question. Resulting in the following sub questions: “How do(es) task division/conflict/legitimate basis for collaboration/collaborative capacity/shared vision/trust affect the collaboration between scientific and non-scientific stakeholders?”.

Methods

In order to answer the research question, a qualitative research method will be applied in the form of semi-structured interviews. A qualitative method is appropriate since the perspectives of stakeholders on collaboration in implementing and evaluating interventions will be taken into account (Richie & Lewis, 2003; Boeije, 2012; Doorewaard et al., 2015). The interviews will be semi-structured since the theoretical framework about governance gives some structure to concepts that will be mentioned in the interviews. But the semi-structured design also allows some room for new observations.

The used framework of Hudson, et al. (1999) has to the best knowledge of the researcher not been applied in the social sciences and to research the role of governance on the collaboration on implementing and evaluating complex interventions. Therefore allowing for some flexibility in the interview questions is appropriate.

Before the interviews were conducted participants got an information letter informing them about them about the research and their rights (Appendix A). The participants also signed an informed consent form, agreeing that they knew what that the research was about and what their rights were (Appendix A). All the information the participants provided was treated with the utmost confidentiality and participants knew participation was voluntary and they could drop out at any moment. Permission to perform this research has been granted by the ethics commission of Utrecht University. More information of the ethical aspects can be found in appendix B. After the interviews were conducted the participants had the opportunity to change, add or delete certain information they provided in the transcripts which was done by some participants.

An interview guide was constructed in order to submit the interviews (appendix C). This guide was structured according to emerged themes from the Hudson framework about governance (appendix D). Which served as the basis for the questions that were asked. First a pilot-study, consisting of three interviews, was conducted in order to test the use of the

interview guide. This pilot study led to some minor adjustments in phrasing certain questions differently, using some different terminology in some questions and adding one question.

Data analysis was done via NVivo 12. The codes that emerged from the literature served as basis for the coding tree that was created (appendix E). Codes that emerged from the transcripts were added just as bycatch, to make use of the semi-structured design of this research. This was done via a round of open coding where the first codes will be applied to describe pieces of data. Then an axial round of coding took place where the open codes will be categorized according to emerging themes. Finally a round of selective coding was done to select the relevant codes to answer the research question and sub questions and also to categorize the most important bycatch. This allowed for a directed content analysis to validate certain concepts from the theoretical framework of governance or to add or debunk certain concepts (Hsieh & Shannon, 2005).

Participants

The interviews were conducted with stakeholders involved in complex environmental interventions in Overvecht. The stakeholders have been picked by certain members from IGLO to function as rich sources of information. A list with names, contact information and details about the intervention stakeholders participated in was sent to the researcher. An invitation along with an informative letter and informed consent, informing them about their rights in the research was sent to the potential participants after which eleven of the twenty potential participants participated in this research.

Potential stakeholders were involved in the following interventions: social renovating (social renoveren), green ribbon (groene lint), demolition and construction of a 10 floor building and renovating Gagelbos. Social renovating focusses on renovating a building and helping the residents of that building with certain issues in their life such as their mental state and finances. The green ribbon intervention wants to create a green route in Overvecht to encourage people to go outside more and enjoy the scenery. The demolition and construction of a 10 floor building wants to replace an old building by a new building. Renovating Gagelbos focusses on renovating a forest and fort near Overvecht to also encourage people to go outside more and enjoy the scenery. The gagelbos and green ribbon intervention were in a start-up phase and sort of combined into one intervention: improving green. All these interventions try to better the health situation of people by intervening in environmental

factors, and also personal factors in the case of social renovating, and involve multiple stakeholders with a scientific and non-scientific background.

Stakeholders that were interviewed were researchers, professionals involved in the practical implementation of the interventions, housing corporations, call center workers and overseers of different collaborations. A more detailed list on what interventions the participants worked can be found below. Participants with a code starting with “w” are scientists, participants with a code “p” are non-scientific stakeholders.

<u>Participant</u>	<u>Intervention</u>	<u>Organisation</u>
W1	Social renovating, improving green	Utrecht University
W2	Social renovating, improving green	UMC
P1	Improving green	Utrecht Province
P2	Social renovating	Centrum voor Woononderzoek
P3	Social renovating	BOEX
P4	Social renovating	Centrum voor Woononderzoek
P5	Improving green	Staatsbosbeheer
P6	Social renovating	Portaal
P7	Social renovating	Centrum voor Woononderzoek
P8	Social renovating	Portaal
P9	Social renovating	UUM

The duration of the interviews was between half an hour and an hour and the number of participant interviewed was 11. Interviews were conducted in accordance with the COVID-19 restrictions at the time and were therefore conducted via Microsoft teams. Interviews were also recorded via Teams so that they could be transcribed. The interviews were conducted in Dutch, but relevant citations were translated to English to serve as arguments for certain findings.

Results

This section will discuss the results according to the sub questions that were used in this research and tries to answer those questions according to the data that was derived from the interviews. The most important bycatch will also be discussed.

Task division

In all the interventions, all the participants said that the tasks were divided before the intervention started. All the stakeholders knew what to do and were doing the tasks in accordance with their expertise. Sometimes certain stakeholders, either scientific or non-scientific, had the lead in the division of tasks, as illustrated by participant p1.

“So before you know it there are different expertise’s involved, all with their own wort hand meaning, but in this case the municipality of Utrecht was in the lead” (Participant p1).

Sometimes the tasks were divided by certain scientific and non-scientific stakeholders amongst each other. And sometimes scientists gave tasks to non-scientists and the other way around. But tasks were always divided in accordance with everyone’s expertise.

Because of this the tasks performed by the involved stakeholders can be considered complementary. The scientists mostly served to make insightful how health was improved by conducting surveys. Those surveys were also constructed by complementing certain tasks and expertise’s as illustrated by participant p7.

“Portaal wants to help the resident by renovating their house and that also involves bettering their health. Do you live in a healty house? So that complements each other” (Participant p7).

There were some reports of miscommunication and mistiming of tasks which resulted in tasks being performed later, because for example a stakeholder from Utrecht University had to get some approval from the university to conduct a survey. Some tasks also had to be done in different ways because of a new law General Data Protection Regulation (GDPR) in the Netherlands which prohibited sharing certain information on what tasks were performed, this mostly prohibited non-scientific stakeholder involved with caring for people to share certain information.

There was also some mentioning of competition in the performed tasks. This happened for example in the improving green intervention where there was some competition between partners who wanted to increase the number of visitors by building a sport accommodation

and others wanted to preserve the environment. This mostly happened in the early stages of the interventions and could eventually be solved via discussions or reaching certain compromises. These findings were all found in the implementation phase of the intervention.

The evaluation tasks were solely performed by the scientific stakeholders although the scientific stakeholders had the idea they also involved the non-scientific stakeholders these feeling were not mutual. Some adjustments in methods being used were however influenced by advice from non-scientific partners.

Repetition rarely happened and was only mentioned by a scientist in the improving green intervention who encountered a different stakeholder in a park who were also talking about what people thought of the nature in the neighbourhood.

Conflict

Most of the participants mentioned some difference in language being used between non-scientific stakeholders but also between scientific and non-scientific stakeholders. The same can be said about culture between the involved participants and the protocols certain stakeholders used. Participants from a different background tend to formulate issues in different ways and also work in different ways and over time these differences tended to fade by communicating but also some trial and error. This resulted in some miscommunication and sometimes small conflicts in the early stages of the collaboration with how to formulate certain issues. However over time these issues became less apparent. Some participants described that they got some new insights and learned new ways of working because of these conflicts. This resulted in an embedment of language and culture in both the implementation and evaluation phase of the intervention.

Different ways of carrying out certain tasks had to be found but also to evaluate certain aspects of the intervention. This made the involved stakeholders dependent of each other and this could lead to small frictions if a stakeholder wants to do something fast and in a certain way as described by participant p1.

“Yes, there is a great dependence on each other and that is annoying sometimes. Sometimes you just want to push through and you don’t want to hear the whining of someone else, even though they are right.” (Participant p1).

But the interdependent state most of the time lead to getting better results in certain phases. In the beginning of the interventions the stakeholders were more independent and worked in

ways or via protocols from their own organisation. And this led to some delays in actually doing something which happened between the scientific and non-scientific stakeholders from the social renovating intervention. But this did not result in any big issues since the working relationships were described as positive and grew over time. This was shown by scientific and non-scientific stakeholders being able to ask to do certain tasks for each other.

Resources were sometimes shared only if this was allowed by funders and if enough resources were available, however mostly in the beginning there was some uncertainty in investing resources between stakeholders by not being sure what the investment would accomplish. These uncertainties were mentioned by both scientists and non-scientists as described by participant w2 for example:

“This is really hard the moment people are taken out of their proces, especially when they are busy and participating takes a lot of time and energy. You ask them to invest something in the collaboration, without really knowing what the importance is. This is even harder when stakeholders speak different languages”. (Participant w2)

No symbiotic state was reached however regarding the available funding, this did not hinder the collaboration however. Knowledge was also mentioned as a resource and this was heavily shared, where possible in compliance with the GDPR, and can be described as reaching a symbiotic state which influenced the collaboration in a positive way as described by participant p4:

“Yes, I can also explain why that makes me happy. I see an embedment forming from organisations” (Participant p4).

Legitimate basis for collaboration

The legitimate basis for all the interventions according to all the participants was collaborating to have a bigger chance to increase the health of people living in Overvecht. This was in accordance with all the participants in all the interventions. This gave all the participants motivation with performing certain tasks in either the implementation or evaluation.

The participants believed that the involved stakeholders were the right ones and that they added knowledge and skills to each other and. As is seen in the social renovating intervention:

“The combination of renovating the flat and helping the people with social issues. And there you see the involvement of both the physical aspect of renovating the flat via the housing corporation and the BAM and also the involvement of social partners.” (participant w1).

A network formed which was needed to help the people in Overvecht with their lives and problems as described by participant p4:

“Yes, like I said, a network was created which is in accordance with the needs of the target population”. (Participant p4)

This network grew over time if new stakeholders were involved or when the collaboration progressed along the way and some participants described this as a network that could also be used in future collaborations.

Some stakeholders found the lack of involvement of people living in Overvecht or for example the involvement of police officers patrolling the neighbourhoods a loss. This was felt by both scientific and non-scientific participants. The first was considered but did not happen, because it would complicate the collaboration even more. The size of the different collaborations should not be much bigger according to some of the participants, as described by participant p5:

“In the Netherlands there already is a consultation culture, if that gets even bigger it will get too much and the overview gets lost”. (Participant p5).

Collaborative capacity

There were barely reports of stakeholders dropping out of the collaboration, but when it happened it hindered the collaboration for a bit. Sometimes stakeholders were added, because they would provide certain knowledge or skills regarding either renovating a building or reaching residents of Overvecht. These only affected the collaboration in a positive way. Different stakeholders were also more present during certain parts of the collaboration and less so in other parts. This was dependent on certain knowledge and skills a stakeholder would provide in a certain part of the intervention and did not lead to big issues. Shifts in intensity mostly occurred to adjust to some practical issues that presented itself.

In the beginning of all the interventions there were more boundaries between the involved stakeholders. This was described by all the participants. The stakeholders were thinking more from their own perspective but over time grew towards each other:

“If you know what I mean with the fences between organisations. Portaal wants to renovate, the municipality thinks it is interesting, the university wants to conduct some research. So it was loose sand that needed to get together”. (Participant p4)

The boundaries between stakeholders also vanished due to more clarification in the roles the stakeholders had in the intervention and how to define progress:

“And we finally consulted with each other from different perspectives, what is social renovating? What does it mean from their perspective? What is their goal? Which steps have to get taken to make the intervention a succes.”. (Participant w1)

Because of this the expertise's of the involved stakeholders could be used to reach certain goals, but also required some adjustment in how to work. This resulted sometimes in a feeling of a small loss of autonomy when performing certain tasks in different ways. Although this was only reported by the scientific partners and they did not see it as a big problem and sometimes as a challenge to do things in a new way and learn new things. No big power imbalances were reported. Stakeholders mostly worked together without a hierarchical structure, but sometimes a stakeholders took the lead in certain part of the intervention because of expertise or to accomplish something more quickly.

Knowing each other better can be described as the social purpose of the collaboration and was impaired by the COVID-19 restrictions in place which made social contact less frequent. The social aspects of working together impacted the collaboration in a positive way and grew over time. This also resulted in participants doing more small chores for each other and knowing who to reach to perform certain tasks.

Shared vision

Conflicting views have been given about when was decided what the shared vision was, but also what the shared vision was. Some said at the beginning when stakeholders first met, others said it was formed in a later stage. Most participants agreed however that the shared vision on what do with the intervention or certain aspects of the intervention changed somewhat along the way describing some flexibility in the formation of a shared vision, this happened due to conversations between the stakeholders on what was necessary to develop.

“With that I mean that you constantly have to adapt to the changing environment, which is worse in improving green than with other interventions. As researcher you lag a bit behind, because you want to evaluate what happens in the changing”. (participant w1)

Interestingly most of the participants answered yes on the question whether there was some form of shared vision. But answers on what that shared vision was differed among some participants involved in the same intervention. In the social renovating intervention for example the goals were described as bettering the health of residents in the flats and also as simply renovating the flat. This was acknowledged by some participants who described the existence of multiple visions or goals next to each other, also described as leading visions or goals and sub visions or goals.

The leading visions served the goals of the collaboration in an interventions, the sub visions or goals served most of the time as goals for the organisations the participants were originally active for and sometimes personal interests. These sub visions were not necessarily conflicting with the leading visions.

Trust among stakeholders

All of the participants described that there was trust among most stakeholders. This was visible because stakeholders shared information amongst each other and as far as they knew were open about their goals and motives, although some goals were not known before the intervention:

“No, not those sub goals, I always find out about those during meetings”. (participant w2)

Some stakeholders were less willing to share some information because these stakeholders had to deal with sensitive personal information from some people living in Overvecht. Some information also could not be shared because of the GDPR. However getting some of the personal information was sometimes possible via other ways without damaging the trust between the involved stakeholders. Although this was only possible due to calculating the risk if this would yield enough investment. There was heavily invested in developing trust between the stakeholders both willingly and less willingly to share information and this increased the overall amount of trust and made it possible to economize trust. It was easier for stakeholders that were already familiar with each other to trust each other.

The personal relationships were also important in the amount of trust between and the stakeholders and personal relationships increased the amount of trust but also the other way around. No form of manipulation, pre-commitment and use of power were mentioned by the participants.

Bycatch

The most important bycatch caught in the data mentioned the available time, other functions for the available funding laws preventing sharing information, involvement of people living in Overvecht and managing relationships.

Most participants complained of the lack of time the implementation and evaluation of complex interventions was available. This affected the funding in a negative way because some funding was only available for a certain amount of time. Furthermore was more time necessary to measure the effectiveness of an intervention, but also to give form to the collaboration and get familiar with each other.

The available funding was sufficient but it would be helpful if there was more funding. And also some funding could be assigned in different ways to be more useful to shared goals instead of certain specific goals for specific stakeholders. Some funding should also be assigned to make room to give form to the collaboration according to some participants.

Some laws prevented the sharing of information hindering the collaboration but this was something the stakeholders did not have much influence on.

Involvement of the people living in Overvecht affected by the intervention should also be increased according to some participants. This to get to know their viewpoints on certain issues better and help them better, this would however further complicate the collaboration more.

Managing personal relationships is also important to make the collaboration a success and can be done via either an external person or someone involved in the collaboration.

Conclusion and Discussion

So concluding, governance influences the collaboration between scientific and non-scientific stakeholders in different ways.

The tasks were divided in accordance with the expertise's of the involved stakeholders and this benefitted the collaboration since stakeholders who were most skilled at performing certain tasks performed those tasks. The tasks were mostly complementary because of this and this also benefitted the collaboration in accordance with the theory of Hudson, et al (1999). The tasks were mostly divided before the collaboration begun, but sometimes when necessary during the collaboration to anticipate to certain practical issues. This made the division of labour clear, but also allowed for some flexibility which seems necessary to adjust to the changing world in a non-experimental setting, this was not mentioned in the theory of

Hudson, et al. (1999) but seems like an important addition. If tasks were divided during the collaboration this resulted in some minor discussion and certain task being completed later than planned, but this seemed to be unavoidable and eventually benefitted the collaboration. This could also lead to competition in performing tasks, but competition eventually lead to compromises and did not hinder the collaboration too much or sometimes even led to new insights, in accordance with Huxam, et al. (2000).

The different languages the involved stakeholders used and the different ways of working and protocols the involved stakeholders had, had to be adjusted to each other and this happened mostly in the early stages of the collaboration. These differences sometimes led to conflicts, but those conflicts could lead to new insights and were eventually solved over time. This led to embedment of language and culture and made the stakeholders more dependent on each other, mostly benefiting the collaboration (Hudson, et al. 1999; Huxam, et al. 2000).

Sometimes stakeholders became more independent during certain phases of the collaboration to get something done more quickly. No symbiotic state was reached regarding funding, but a symbiotic state was reached with sharing information, benefitting the collaboration in accordance with Imperial, (2005) and Hudson, et al. (1999). Reaching a symbiotic state with funding could benefit the collaboration even more however.

Because of the collaboration more people in Overvecht could potentially get a better health and this gave all the participants more motivation to make the collaboration a success. The involved stakeholders were the right ones and this also benefitted the collaboration, although the residents of Overvecht could be more involved, but the collaborations might become too big because of this. Eventually the stakeholders formed a network and this network could also be beneficial for future collaborations and fits the social network approach described by Woulfe, et al. (2010); Willis, et al. (2016) and Ward, et al. (2018).

Dropping out of stakeholders in these collaborations barely happened, but when it happened it was not beneficial for the collaboration. The addition of stakeholders happened a couple of times to provide more knowledge and skills, this complicated the collaboration a bit by making it more complex and stakeholders had to adjust to each other. However the knowledge and skills those stakeholders brought to the collaboration eventually was more beneficial. To make the most use of this balance between complexity and providing knowledge and skills, some stakeholders were more present during certain parts of the collaboration, this can be seen as the identity of the role of stakeholders in accordance with Huxam, et al. (2000). The boundaries between the involved stakeholders at the beginning of the intervention eventually

vanished partly due to more clarification on what role certain stakeholders had in the collaboration but also by getting to know the perspectives of different stakeholders and knowing each other in general, this kind of ambiguity benefitted the collaboration in accordance with Huxam, et al. (2000). To reach certain goals some stakeholders had to adjust certain ways of working, but this was more seen as a challenge. The stakeholders worked together without any real hierarchical structure, except in certain parts of the intervention where one or more stakeholders temporarily took the lead as in line with research from Willis, et al. (2016) and Ward, et al. (2018). Taking the lead made the collaboration more efficient.

The shared vision was largely created before the collaboration, but changed somewhat along the way showing some flexibility which is necessary to adjust to a non-experimental setting, this is beneficial to the collaboration in accordance with Hudson, et al. (1999) and Imperial (2005). Interestingly there were different views on what the shared vision was of the interventions, but this could be explained by the existence of multiple visions or goals also described as leading visions and sub-visions. This can furthermore be explained by findings from other research that suggested that non-scientific stakeholders are more interested in the efficacy of an intervention whereas scientists are more interested in the effects of an intervention (Tarquinio, et al. 2014). These different visions served different sub goals but did not hinder the collaboration and directly and indirectly served the leading goal of the collaboration (Huxam, et al. 2000).

There was sufficient trust among the stakeholders and this only benefitted the collaboration in accordance with Hudson, et al. (1999) and Imperial (2005). Trust was increased by personal relationships, but trust also increased personal relationships in accordance with the theory of Hudson, et al. (1999). The withholding of information made stakeholders less trustworthy, but this only happened with certain stakeholders who had good reasons to do so and therefore this did not impacted the trust in a negative way too much. The better the stakeholders know each other the more trust there is between them. No form of manipulation, pre-commitment and use of power were mentioned by the participants, possibly because these kind of collaborations are relatively new and no big expectations were formed beforehand. It was more seen as a kind of test.

Other factors mentioned that hindered the collaboration were the lack of available time, because this was necessary for embedment of language and culture, but also to increase trust and to better anticipate to or deal with practical issues and evaluate the intervention as also described by Ling (2016), Brown, et al. (2019), Karacabeyl, et al. (2018) and Woulfe, et al.

(2010). The existence of the GDPR law made the sharing of information more difficult and this also hindered the collaboration and can be seen as an hindering environmental factor as described by Briggs (2008). These concepts were mentioned in empirical data and can be seen as an addition to the theory of Hudson, et al. (1999).

Factors that would benefit the collaboration are more funding and sharing of funding between the stakeholders. The involvement of residents of Overvecht could complicate the collaboration even more by the addition of a new stakeholder, but might also result in getting important information and can be seen as a form of participatory research (Green, et al. 2001; Ward, et al. 2018). This would also make the collaboration active in more ecological layers such as the microsystem, mesosystem and macrosystem as described by Karacabeyli, et al. (2018), Sallis, (2018), Komro, et al. (n.d.), Woulfe, et al. (2010) and would allow for a pragmatic synthesis approach to be used as methodology (Chen, 2016). Managing personal relationships in a more structured way might also be beneficial for the collaboration via either an external or internal person who is trusted by the involved stakeholders.

Almost all of the findings of this research are in line with the theory of governance from Hudson, et al. (1999), this can be explained by the fact that the theoretical model that was used was altered to be more fitting to a non-commercial collaboration. Therefore certain factors like making profit were not present in the model being used in this research. Since there were no concrete directions in the original model the findings were easier fitted in the model in for this research and this research can be seen as an expansion on the original model. The only differences found with the original model was that the existence of multiple visions and or goals could exist next to each other and did not hurt the collaboration, because those goals and visions did not interfere with the main goal/vision.

Limitations and strengths

This research had its limitations and strengths. Some limitations were the fact that not all people who were approached by the researcher responded, resulting in a sample that might be biased in a way. This might have affected the external validity in a negative way and the ecological validity as well, since a biased sample is less representative outside the research setting and results might therefore not be applicable to other settings. The selected people who could be approached were selected by a member of the collaboration, resulting in a sample that knows a lot about the collaboration. This affected the internal validity in a positive way since resourceful information was brought forward. The external validity might have

increased, since the information brought forward by the participants is more detailed and more generalizable. This might also have increased the ecological validity. The use of interviews in an online setting was a good way to get to know the perspectives of the participants, increasing the internal validity, but the perspectives are not very generalizable, therefore the external validity is decreased. Since perspectives from multiple stakeholders from multiple interventions have been taken into account the ecological validity is increased. Most interventions already started a year prior to this research, some respondents could not remember everything exactly in the interviews, decreasing the internal validity. This has been partly solved by sending the transcripts of the interviews to the participants so they could alter or add stuff. No alterations have been made, but some gaps have been filled in, increasing the internal validity.

Overall this research can be seen as an expansion to the existing theories of Hudson, et al. (1999) and Huxam, et al. (2000). This research found that these theories can be used for collaborations in social sciences as well, with some adjustments. However the duration and size of this research was limited, so future research should be longer and starting from the beginning of the intervention. Interviews can be conducted in structural periods to get the perspectives of multiple stakeholders in different moments of the collaboration. This might get some more insights in how major events, such as the dropping out or addition of stakeholders, affected the collaboration. The observation of several meetings might also be relevant data to see collaborations in live action.

This research also can give some recommendations on how to improve collaborations. A period where the stakeholders can adjust to each other might prove fruitful, since there is more time to embed language and culture and create more trust. This might however increase the overall time for the intervention and there might not be enough funding for this. Some form of leadership might make the collaboration more efficient. The use of existing networks and collaboration between stakeholders that have already collaborated in these kind of interventions before might be useful to increase efficiency and the collaboration in general. But this might give these stakeholders more powerful and this might impact the collaboration in a negative way.

Concluding it seems that there is much promise in these kind of collaboration to increase health in people in general, but also in people with a lower SES. However since these kind of collaborations are new and researching them is as well. Therefore trial and error and observing these kind of collaborations is the only way forward to gather more information and

learn from the good and bad things in these collaborations and improve these kind of collaborations. This way people can get helped with their problems in a better way.

References

Bennett, S., Glandon, D., & Rasanathan, K. (2018). Governing multisectoral action for health in low-income and middle-income countries: unpacking the problem and rising to the challenge. *BMJ Global Health*, 3(Suppl 4), e000880.

Boeije, H. (2012). *Analysis in qualitative research*. Los Angeles: Sage.

Bonell, C., Fletcher, A., Morton, M., Lorenc, T., & Moore, L. (2012). Realist randomised controlled trials: a new approach to evaluating complex public health interventions. *Social science & medicine*, 75(12), 2299-2306.

Bowen, G. A. (2006). Grounded Theory and sensitizing concepts. *International Journal of Qualitative Methods*, 5(3), Article 2.

Briggs, D. J. (2008). A framework for integrated environmental health impact assessment of systemic risks. *Environmental Health*, 7(1), 61.

Brown, A. F., Ma, G. X., Miranda, J., Eng, E., Castille, D., Brockie, T., ... & Trinh-Shevrin, C. (2019). Structural interventions to reduce and eliminate health disparities. *American journal of public health*, 109(S1), S72-S78.

Byrne, D. (2013). Evaluating complex social interventions in a complex world. *Evaluation*, 19(3), 217-228.

Centraal Bureau voor de Statistiek. Gezonde levensverwachting; onderwijsniveau. Statline 2017. Available via:

<http://statline.cbs.nl/StatWeb/publication/?VW=T&DM=SLNL&PA=83780NED&LA=NL>

Chen, H. T. (2016). Interfacing theories of program with theories of evaluation for advancing evaluation practice: Reductionism, systems thinking, and pragmatic synthesis. *Evaluation and program planning*, 59, 109-118.

Craig, P., Dieppe, P., Macintyre, S., Michie, S., Nazareth, I., & Petticrew, M. (2013). Developing and evaluating complex interventions: the new Medical Research Council guidance.

Doorewaard, H., Kil, A., en Ven, A. van de. (2015). *Praktijkgericht kwalitatief onderzoek: Een praktische handleiding*. Amsterdam: Boom Lemma.

Fawcett, S., Schultz, J., Watson-Thompson, J., Fox, M., & Bremby, R. (2010). Peer reviewed: Building multisectoral partnerships for population health and health equity. *Preventing chronic disease*, 7(6).

Fazey, I., Bunse, L., Msika, J., Pinke, M., Preedy, K., Evely, A. C., ... & Reed, M. S. (2014). Evaluating knowledge exchange in interdisciplinary and multi-stakeholder research. *Global Environmental Change*, 25, 204-220.

Green, L. W., & Mercer, S. L. (2001). Can public health researchers and agencies reconcile the push from funding bodies and the pull from communities?. *American journal of public health*, 91(12), 1926-1929.

Honeycutt, S., Leeman, J., McCarthy, W. J., Bastani, R., Carter-Edwards, L., Clark, H., ... & Kegler, M. (2015). Evaluating Policy, Systems, and Environmental Change Interventions: Lessons Learned From CDC's Prevention Research Centers. *Preventing chronic disease*, 12(10), E174.

Karacabeyli, D., Allender, S., Pinkney, S., & Amed, S. (2018). Evaluation of complex community-based childhood obesity prevention interventions. *Obesity reviews*, 19(8), 1080-1092.

Komro, K. A., Flay, B. R., Biglan, A., & Wagenaar, A. C. (2016). Research design issues for evaluating complex multicomponent interventions in neighborhoods and communities. *Translational Behavioral Medicine*, 6(1), 153-159.

Ling, T. (2012). Evaluating complex and unfolding interventions in real time. *Evaluation*, 18(1), 79-91.

MacFarlane, A. & O'Reilly-de Brún (2012). Using a theory-driven conceptual framework in qualitative health research. *Qualitative Health Research*, 22(5), 607-618.

MacQueen, K. M., McLellan, E., Metzger, D. S., Kegeles, S., Strauss, R. P., Scotti, R., ... & Trotter, R. T. (2001). What is community? An evidence-based definition for participatory public health. *American journal of public health*, 91(12), 1929-1938.

Mandarano, L. A. (2008). Evaluating collaborative environmental planning outputs and outcomes: restoring and protecting habitat and the New York—New Jersey harbor estuary program. *Journal of planning education and research*, 27(4), 456-468.

Mâsse, L. C., Moser, R. P., Stokols, D., Taylor, B. K., Marcus, S. E., Morgan, G. D., ... & Trochim, W. M. (2008). Measuring collaboration and transdisciplinary integration in team science. *American journal of preventive medicine*, 35(2), S151-S160.

Mezirow, J. (1997). Transformative learning: Theory to practice. *New directions for adult and continuing education*, 1997(74), 5-12.

O'Fallon, L. R., & Deary, A. (2002). Community-based participatory research as a tool to advance environmental health sciences. *Environmental health perspectives*, 110(suppl 2), 155-159.

Pharos (2019) (1). Factsheet Sociaaleconomische Gezondheidsverschillen, Juli 2019.

Retrieved via: <https://www.pharos.nl/factsheets/sociaaleconomische-gezondheidsverschillen-segv/>

Pharos (2019) (2). Gezondheidsverschillen Duurzaam Aanpakken, April 2019. Retrieved via:

<https://www.pharos.nl/gezondheidsverschillen-duurzaam-aanpakken/>

Raad Volksgezondheid & Samenleving (2020). Gezondheidsverschillen Voorbij: Complexe Ongelijkheid is een Zaak van Ons Allemaal. Retrieved at:

<https://adviezen.raadrvs.nl/gezondheidsverschillen-voorbij/>

Rehfuss, E. A., & Bartram, J. (2014). Beyond direct impact: Evidence synthesis towards a better understanding of effectiveness of environmental health interventions. *International journal of hygiene and environmental health*, 217(2-3), 155-159.

Ritchie, J. and Lewis, J. (Eds.). (2003). *Qualitative research practice: A guide for social science students and researchers*. sage.

Rycroft-Malone, J., Burton, C. R., Wilkinson, J., Harvey, G., McCormack, B., Baker, R., ... & Williams, L. (2015). Collective action for implementation: a realist evaluation of organisational collaboration in healthcare. *Implementation Science*, 11(1), 1-17.

Sallis, J. F. (2018). Needs and challenges related to multilevel interventions: Physical activity examples. *Health Education & Behavior*, 45(5), 661-667.

Tarquinio, C., Kivits, J., Minary, L., Coste, J., & Alla, F. (2015). Evaluating complex interventions: perspectives and issues for health behaviour change interventions. *Psychology & health*, 30(1), 35-51.

Smith, R. D., & Petticrew, M. (2010). Public health evaluation in the twenty-first century: time to see the wood as well as the trees. *Journal of Public Health*, 32(1), 2-7.

Ward, M., Schulz, A. J., Israel, B. A., Rice, K., Martenies, S. E., & Markarian, E. (2018). A conceptual framework for evaluating health equity promotion within community-based participatory research partnerships. *Evaluation and program planning*, 70, 25-34.

Willis, C. D., Greene, J. K., Abramowicz, A., & Riley, B. L. (2016). Strengthening the evidence and action on multi-sectoral partnerships in public health: an action research initiative. *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice*, 36(6), 101.

Woulfe, J., Oliver, T. R., Zahner, S. J., & Siemering, K. Q. Multisector Partnerships in Population Health Improvement Posted on October 15, 2010 by.

Zimmerman, M. A. (1995). Psychological empowerment: Issues and illustrations. *American journal of community psychology*, 23(5), 581-599

Zimmerman, M. A. (2000). Empowerment theory. In *Handbook of community psychology* (pp. 43-63). Springer US.

Appendixes

A

Deelnemersinformatie voor professionals



Universiteit Utrecht



UMC Utrecht

IGLO: een onderzoek van de Universiteit Utrecht en het UMC Utrecht

IGLO betekent: 'Iedereen een Gezonde LeefOmgeving in Utrecht'.

Geachte heer, mevrouw,

Introductie

In deze brief nodigen we u uit voor een interview over het IGLO Utrecht onderzoek. Het doel van het IGLO onderzoek is om het effect van verschillende ruimtelijke interventies in Overvecht op de gezondheid van haar bewoners te evalueren. Onderdeel van het onderzoek is het interviewen van professionals over hun ideeën over hoe de samenwerking verloopt tussen de partners die betrokken zijn bij dit evaluatieonderzoek. We nodigen hiervoor professionals met verschillende professionele achtergronden uit, die bij één of meerdere van de interventies betrokken zijn en vanuit hun kennis en ervaring een relevante bijdrage kunnen leveren. Uw deelname aan het onderzoek wordt erg op prijs gesteld.

Meedoen

Als u meedoet, maken wij met u een afspraak voor het interview. Het gesprek duurt ongeveer 1. Meedoen aan het onderzoek is vrijwillig. U kunt zonder opgave van redenen uw deelname op elke moment intrekken als u toch niet meer mee wilt doen, ook tijdens het gesprek. De onderzoeksgegevens die tot dan toe al zijn verzameld, worden wel gebruikt in het onderzoek, tenzij u aangeeft dat u dat niet wilt.

Waar gaat het interview over?

Het interview gaat over de interventies in Overvecht die binnen het IGLO-project geëvalueerd worden en hoe de verschillende partners de samenwerking binnen dit onderzoek ervaren. Bijvoorbeeld hoe u uw rol en de rol van andere partners ziet, hoe de taakverdeling in het onderzoek is en of er voldoende tijd en budget is voor het onderzoek.

Voordelen en nadelen voor u

Meedoen aan het onderzoek kost u een uur van uw tijd. Met uw deelname draagt u bij aan het vergroten van wetenschappelijke kennis over hoe ruimtelijke en sociale interventies binnen een wijk het beste geëvalueerd kunnen worden op gezondheidseffecten en hoe de verschillende partners binnen dit onderzoek het beste kunnen samenwerken. Deze kennis wordt tevens gebruikt om gemeentes, woningcorporaties en andere organisaties en stakeholders te adviseren over beleid op dit terrein.

Gegevens gebruiken

De verzamelde informatie uit het gesprek worden gebruikt voor het schrijven van de masterscriptie van Ward Knijnenburg. Daarnaast worden de belangrijkste inzichten uit het onderzoek verwerkt in:

- 1) Rapporten over het IGLO onderzoek,
- 2) Wetenschappelijke artikelen over het onderzoek

Vertrouwelijkheid van de gegevens

Om uw privacy te beschermen krijgen uw gegevens een code. Uw naam en de organisatie waar u werkt worden niet bij de interviewtranscripten genoemd, alleen de code. De sleutel van de code wordt veilig opgeborgen bij de Universiteit Utrecht, op een andere plek dan waar de onderzoeksgegevens (de transcripten) worden opgeslagen. Naast Ward Knijnenburg kan alleen de stagebegeleider van Ward, Carlijn Kamphuis, bij deze gegevens. De onderzoeksgegevens kunnen mogelijk na afloop van dit onderzoek ook nog van belang zijn voor ander wetenschappelijk onderzoek. Als dit het geval is, worden de gegevens alleen anoniem gedeeld. In publicaties over het onderzoek zijn de resultaten niet tot u te herleiden. Om uw privacy te beschermen houden wij ons bij het verwerken van uw gegevens aan de AVG, de Algemene Verordening Gegevensbescherming. Alle data worden 10 jaar bewaard.

Opname

We vragen u aan het begin van het interview om toestemming om het gesprek op te nemen. Deze opname gebruiken we om het gesprek uit te typen zodat we de informatie met behulp van computersoftware goed kunnen analyseren en gebruiken voor het onderzoek.

Toestemming

Middels deze brief geven we u uitleg over het onderzoek en tevens is er de mogelijkheid om te bellen met één van de betrokken onderzoekers. Voorafgaand aan het interview vragen we uw schriftelijke toestemming om mee te doen middels een handtekening op een toestemmingsformulier. Daarin worden deze vragen gesteld:

- Heeft u alle informatie over het onderzoek begrepen?
- Heeft u begrepen dat deelname vrijwillig is en dat u mag stoppen als u niet meer mee wilt doen?
- Doet u mee met dit kwalitatieve onderzoek van de Universiteit Utrecht?
- Vindt u het goed dat het gesprek wordt opgenomen?

Heeft u een vraag of klacht?

Als u een vraag heeft over het onderzoek kunt u contact opnemen met Ward Knijnenburg (w.e.knijnenburg@students.uu.nl) of Carlijn Kamphuis (c.b.m.kamphuis@uu.nl).

Heeft u een klacht over het onderzoek? Dan kunt u dit bespreken met de onderzoeker. U kunt het ook bespreken met een klachtenbemiddelaar van de Universiteit Utrecht. Zij zijn bereikbaar via klachtenfunctionaris-fetcsocwet@uu.nl

Voor een klacht of vraag over de behandeling van uw gegevens kunt u ook contact opnemen met de Functionaris voor Gegevensbescherming van de UU: privacy@uu.nl of met de Autoriteit Persoonsgegevens: <https://www.autoriteitpersoonsgegevens.nl/>



Universiteit Utrecht



UMC Utrecht

IGLO Utrecht: *Iedereen een Gezonde LeefOmgeving in Utrecht*

Toestemmingsformulier voor deelname aan een kwalitatief onderzoek

Vraag:

Uw antwoord:

Heeft u alle informatie over het onderzoek begrepen?

Ja / nee

Heeft u begrepen dat deelname vrijwillig is en dat u mag stoppen als u niet meer mee wilt doen?

Ja / nee

Doet u mee met dit kwalitatieve onderzoek van de Universiteit Utrecht?

Ja / nee

Vindt u het goed als de onderzoeker het gesprek opneemt?

Ja / nee

Ik verklaar hierbij dat ik de informatiebrief over het IGLO Utrecht onderzoek heb gelezen en dat ik deelneem aan dit onderzoek

Naam:

Datum:

Handtekening:

B

Ethical Reflection Master's Thesis Design

Research topic and design

For my master's thesis design I will be doing a RIT where I will be conducting research on the topic of the collaboration between multiple stakeholders regarding complex environmental interventions and what role this collaboration plays in the evaluation process. The research question being used is: "How does the collaboration between stakeholders with a scientific and non-scientific background affects the evaluation of complex interventions regarding health issues?" The questions focus mostly on the collaboration between stakeholders and want to capture their insights on these issues, therefore a qualitative research method is most appropriate. To answer the research questions interviews with relevant stakeholders will be conducted. These interviews will be around one hour in length and will be of a semi-structured nature. An interview guide will be constructed where the questions will be based on the most important topics derived from the literature. Interviews will be conducted with keeping the COVID-19 restrictions at the time in mind and will therefore most likely be conducted via Microsoft Teams or a similar program. Recruitment will take place via an external organization, IGLO consortium, that focuses on complex environmental interventions where relevant stakeholders can be asked to participate in this research. The sample will eventually consist of around 15-20 stakeholders depending on when the point of saturation is reached. The collected data will be analysed via NVivo 12 where codes will be applied to the transcripts of the conducted interviews in order to analyse the data in a scientific and transparent way.

Ethical issues

Before the interviews will be conducted participants will be shown an informed consent form informing them about their rights during the research process. The informed consent will also briefly inform them about the research subject. This form will show them that participating in the research is voluntary and that the participant can drop out at any moment without giving a reason. Participants can also refuse to answer any questions they want to. Participants will be

informed that the interviews will be recorded in order for me to listen back to the interviews to write out the transcript, after the research is done those recordings and transcripts will be deleted. Participants can however refuse to let the interviews be recorded, also without giving any reason. The informed consent will furthermore state that all provided information by the participants will be handled with the utmost care and that I will do my best to make sure none of the information participants will provide, will be traceable back to them. Lastly, participants are also given the option to see the final results of the research to get an insight in how the data they provided has been processed and the participants will be able at any time during the research process to take a look at the data they provided to make sure I processed it right. If the participants agree they sign the form and can participate in the research.

The group participants I am researching are not a so called risk group, are all above the age of 18 and presumably mentally competent and are therefore able to provide their own consent for participating in this research. During this research I will try to minimize the risk of harm. The topic is not particularly sensitive or a taboo subject, but sensitive issues can always come up during an interview and have to be taken into account. Sensitive issues that may arise will most likely be about work-related frustrations or frustrations with colleagues or other stakeholders. In order to answer the research question it might be relevant to dive a bit deeper in to those frustrations, since frustrations might affect the collaboration between stakeholders. I am aware of this issue and depending on how the participant reacts to this I will either stop asking about this topic if it is too sensitive or try to get more information but also referring to the signed informed consent form to remind the participant that he or she can always refuse to answer a question. In case something like this comes up I will in either situation try to assure the participant that I sense it is a sensitive issue and I will try to deal with it the best way I can. I will also assure the participant that the provided information will be treated anonymously. This will require finding a constant balance between getting as much information as possible and making sure the participants do not feel too uncomfortable.

The data the participants provide will be processed in a way to try to ensure as much anonymity as possible. No names will be linked to the recordings and transcripts. The same goes for certain functions people have, places they live or work, names of colleagues the participants provide or any other information the participants provide that might reveal their identity or can lead to the revelation of their identity. If a situation might present itself where it is necessary for the research to provide certain information that can lead to the revelation of the identity of one of the participants, this will be discussed with the participant in question in

order to find a suitable solution. The transcripts, recordings and other data the participants provide will be stored on a safe location on the U-drive. Only I and my supervisor can access this data. I will be discussing with my supervisor what the most appropriated programs and ways to do this are.

Possible changes to this research

So far no possible issues have come to surface that should lead to changes in this research. As discussed earlier, the research questions should not lead to specific issues that lead to direct changes. Should some issues come up during the research that makes it inappropriate to answer either one of the questions or both, changes will be made. This will most likely be a result of the earlier mentioned ethical issues that may arise regarding frustration in the collaboration or talking about colleagues or stakeholders the participants work with. If this happens regarding only one of the research question this one will be scrapped if impossible to answer, if this happens to both I will try to change either one or both of the questions in order to still conduct a research. I will discuss with my supervisor what is the most appropriate way to do this. The second scenario is however highly unlikely to happen. If my research methods turn out to be inappropriate to conduct I can try to conduct a survey, however similar issues may still arise with this method but in a less extreme way since answers provided to a survey are not as detailed as to an interview. However, as mentioned earlier, all the mentioned changes here are unlikely to happen but some anticipation to even unlikely scenarios is always good to take into account.

C

Interviewguide

Goedendag, ik ben Ward Knijnenburg en ik zou vandaag graag een interview bij u af willen nemen over de samenwerking met betrekking tot het evalueren van interventies waar u bij betrokken bent. Ik zal proberen het interview binnen een uur af te ronden. Voor het verwerken van de data zou ik het fijn vinden om het interview op te nemen, deze opname wordt na afloop van het transcriberen weer verwijderd en is puur bedoeld zodat ik het interview kan transcriberen. Gaat u daar mee akkoord? De transcripties kunt u nadat ik ze heb uitgewerkt nog inzien om te kijken of u het eens bent met hoe bepaalde zaken zijn verwoord en of u bepaalde zaken nog uit het interview wilt laten die mogelijk naar u te herleiden zijn. Of juist dingen toe te voegen die u vergeten bent te vertellen. De transcripten moeten volgens protocol minsten 10 jaar bewaard worden op de server van de Universiteit Utrecht, maar zijn in

principe alleen door mij in te zien en zoals eerder dus vermeld zo min mogelijk naar u terug te herleiden.

Tijdens het interview worden er vragen aan u gesteld, waar u vrij op kunt antwoorden. Ik beoordeel uw antwoorden niet, maar ben geïnteresseerd in wat u over bepaalde zaken te vertellen hebt. U kunt geen foute antwoorden geven bij dit interview en alles wat u vertelt zal vertrouwelijk behandeld worden. Ik zal proberen de antwoorden die u geeft zo anoniem mogelijk te verwerken zodat u zo vrij mogelijk kunt vertellen wat u vindt van bepaalde zaken zonder dat dit naar u terug te herleiden is. Dit is niet altijd volledig te garanderen, maar u kunt dus in de transcriptie nog aanpassen. Mocht u een vraag niet willen beantwoorden dan kunt u dit altijd aangeven. Het belangrijkste is dat u zich op uw gemak voelt en dat u uw verhaal kwijt kunt en daarin alles benoemt wat voor u relevant is. Heeft u nog vragen? Dan zou ik nu graag met het interview beginnen.

Voorstellen

Kunt u wat over uw werk vertellen? (Voor welke organisatie bent u actief?) Wat is het type organisatie waar u voor werkt? Wat is uw functie? Hoeveel jaar doet u dit werk al?

Betrokkenheid uitvoering interventies

De interventies die in het IGLO project geëvalueerd (gaan) worden zijn: het verbeteren en verbinden van het groen en de parken (Gagelbosch, Groene lint/Ommetjes), het sociaal renoveren van sociale huurflats en een sloop-nieuwbouwproject (Ivoordreef).

Bij welke van bovenstaande? interventie(s) in Overvecht bent u betrokken als professional? Sinds wanneer? In welke rol?

Met welke partners/organisatie werkt u samen voor de uitvoering van deze interventie(s)? Hoe precies? Sinds wanneer?

Hoe gaat de samenwerking tussen de verschillende partners/organisatie binnen de uitvoering van de interventies?

Betrokkenheid evaluatieonderzoek

Kunt u vertellen wanneer u voor de eerste keer hoorde dat onderzoekers van de Universiteit Utrecht en het UMC de effecten van interventies in Overvecht op gezondheid/welzijn van inwoners wilden gaan evalueren? Wat dacht u daarvan? Wat denkt u daar nu van?

Hoe zou u de samenwerking in de evaluatie van [naam interventie(s)] omschrijven?

Doorvragen naar wat de samenwerking goed of slecht maakt

Samenwerking evaluatieproces

Hoe zou u de rol van uzelf in het evaluatieproces omschrijven?

Wat is er anders aan deze rol dan de rol die aanneemt in [naam organisatie participant]?

Doorvragen naar de balans en grens tussen deze twee rollen en hoe dit bij andere stakeholders tot uiting komt

Hoe zou u de rol van stakeholders/partners in het evaluatieproces omschrijven waar u mee samenwerkt?

Doorvragen naar rol van autonomie en gevoel van power of de balans tussen deze twee concepten

Doorvragen naar wat de stakeholders aan elkaar toevoegen

Doorvragen naar wat anders is in de samenwerking in het evaluatieproces en het implementatieproces

Zijn de stakeholders die nu zijn betrokken bij het evaluatieproces de juiste stakeholders of zijn er stakeholders die missen of overbodig zijn? En waarom worden die gemist of zijn ze overbodig?

Doorvragen naar de voordelen en nadelen van betrokken stakeholders

Doorvragen naar of er voldoende disciplines betrokken zijn en hoe de samenwerking tussen wetenschappelijke en niet-wetenschappelijke stakeholders gaat

Doorvragen naar afhankelijkheid en onafhankelijkheid tussen stakeholders

Hoe zou u de werkrelatie tussen de betrokken stakeholders omschrijven?

Welke taken worden er uitgevoerd in het evaluatieproces?

Hoe worden die verdeeld?

Doorvragen naar welke methoden worden gebruikt

Hoe worden de doelen/gezamenlijke visie met betrekking tot de evaluatie vastgesteld?

Gebeurt dit vooraf of tijdens de evaluatie?

Doorvragen naar hoe taalgebruik van verschillende disciplines en wetenschappelijke en niet wetenschappelijke achtergrond op elkaar worden afgesteld

Doorvragen naar flexibiliteit in gestelde doelen

Hoe worden de beschikbare resources/hulpmiddelen zoals budget verdeeld tussen de stakeholders om deze doelen te bereiken?

Is er in uw ogen voldoende vertrouwen tussen de betrokken stakeholders? Hoe komt dat (niet) tot uiting?

Doorvragen naar persoonlijke relaties tussen stakeholders

Wat is in uw ogen het grootste nadeel aan de samenwerking tussen verschillende stakeholders in het evaluatieproces? En waarom?

Wat is het grootste voordeel in de samenwerking en waarom?

Zijn er verder nog dingen die u kwijt wilt?

Hartsikke bedankt voor uw deelname. Ik ga zo snel mogelijk aan de slag met het transcriberen en zal deze dan naar uw doorsturen. U kunt daar gewoon vrij in aangeven welke op- of aanmerkingen u nog heeft. We kunnen eventueel ook nog over de mail of over de telefoon zaken bespreken die u zijn opgevallen, als u daar behoefte aan heeft. Bent u verder nog geïnteresseerd om de uitkomsten van dit onderzoek in te zien? Dank kan ik die ook nog naar u mailen.

D

Topic list

Contextual factors: expectations and constraints → Tasks division

Division of tasks (What tasks, how are they performed, how are they divided among stakeholders?, Use of evaluation methods and resources that are available)

Repetition (evaluating same thing twice or doing certain aspects in the evaluation twice)

Complementary (making use of different expertise's to complete tasks, risk of omission (forgetting to complete certain tasks))

Competition (hindering aspects of different disciplines and/or scientific or non-scientific background)

Recognition of the need to collaborate → Role of conflict and collaboration

Role of conflict (does it help or hinder the process of evaluation)

Feeling of loss of autonomy (sharing resources and expertise, sharing credit, risk and responsibility)

Uncertainty of investment of resources (long time period to measure effects, evaluation takes place on community level)

Reaching a symbiotic state in which resources are being shared (how do resources get shared)

Embedment of language and culture (Adjustment of language between stakeholders from different disciplines and scientific and non-scientific background (Use of RCT, holism, reductionism or pragmatic synthesis (role of participatory research)).

Independent role of stakeholders (Ways in which stakeholders perform according to their disciplinary background/scientific or non-scientific background)

Interdependent role of stakeholders (ways in which a stakeholder performs according to their role in the collaboration)

Working relationships between stakeholders (description of the relationships between stakeholders from different disciplines and scientific and non-scientific background)

Identification of a legitimate basis for collaboration

Identifying benefits of the collaboration (being able to combine different viewpoints and resources How do they get combined?)

Formation of network (how is a network formed and how is it decided that the formed network should be sufficient to perform the evaluation?)

Size of network (decision on size of the network when is it too big or too small)

Variety of involved stakeholders (what disciplines to include and what stakeholders from scientific and non-scientific background to include)

Assessment of collaborative capacity

Dynamics of collaboration regarding changes that happened (role of adding a stakeholder or dropout of a stakeholder in the evaluation process)

Role of loss of autonomy (

Role of power balance (what stakeholders feel more empowered, why, how does this affect the work relationships?)

Amount of collaborative capacity

Identification of roles stakeholders (duality of original and new role)

Ambiguity between roles (how open is someone about this to other stakeholders?)

Boundaries between stakeholders (how does a stakeholder define the boundaries between the two roles?)

Definition of progress (how do stakeholders define progress? Link to use of same language/evaluation methods, influence of ideologies)

Sense of social purpose (do stakeholders feel more connected to (evaluation of) the intervention because of the collaboration? Do they enjoy the social aspects of the collaboration?)

Articulation of a clear sense of collaborative purpose

Creation of a shared vision (How does a vision gets created to decide what to do with the evaluation?)

Before the collaboration (Is this done before the evaluation?)

During the collaboration (Did this vision change during the evaluation and how?)

Goals in shared vision (How did the goals get decided?)

Flexibility of set goals (Is there flexibility in the set goals? How does the amount of flexibility get decided?)

Building up trust from principled conduct

Amount of trust or mistrust (Do you trust other stakeholders? Why, why not? How would you describe the trust or mistrust?)

Economizing of trust (co-ordination of social interaction)

Manipulation (Self-interest)

Pre-commitment (imposing constraints upon oneself to appear trustworthy)

Power (using or threatening to use resources to)

Investment in trust (developed or sustained?)

Calculation of risks (is it worth it to trust someone?)

Adherence to principled conduct (It is impossible to know all the motivations of someone, trust is necessary to collaborate)

Investment in personal relationships (role of familiarity and friendship)

E

MT

Nodes

Name	Description
Budget	
Gap between science and target population	
Governance	
Collaborative capacity	
Ambiguity between roles	
boundaries between stakeholders	
Definition of progress	
Dynamics regarding changes	
Identification role of stakeholders	
Role of loss of autonomy	
Role of power balance	
Sense of social purpose	
Conflict	
embedment language and culture	

Name	Description
feeling loss of autonomy	
independent role of stakeholders	
interdependent role of stakeholders	
role of conflict	
symbiotic state	
uncertainty of investment	
working relationships	
Legitimate basis for collaboration	
benefits of collaboration	
formation of network	
Missing stakeholders	
size of network	
variety of involved stakeholders	
Shared vision	
Before the collaboration	
Creation of shared vision	
During the collaboration	
Flexibility in goals	

Name	Description
Goals in shared vision	
Tasks division	
competition	
complementary	
division of tasks	
repetition	
Trust	
adherence ro principled conduct	
Amount of trust and or mistrust	
calculation of risks	
Economizing of trust	
Investment in personal relationships	
Investment in trust	
Manipulation	
power	
Pre-commitment	
Law (AVG)	
Managing relationships	
Time pressure	