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Article

What works for vulnerable families? Interpretations of effective health promotion

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Summary

Under the umbrella of the Healthy Futures Nearby programme, 46 small-scale projects were funded to promote changes in health-related behaviours (smoking, alcohol, diet and exercise) and to improve perceived health among vulnerable families in the Netherlands. The evaluation of these health-related multiple project programmes is often based on funder-defined outcomes and strategies. However, within the funded projects, assumptions about improving the health of vulnerable families based on local knowledge and experiences will also shape the project outcomes and strategies. These additional outcomes and strategies are project-specific interpretations of effective health promotion. Knowing these interpretations is crucial for the policy related and scientific relevance of the evaluation. Therefore, we aimed to determine the interpretations of each project and how they translate into relevant inputs for the overall evaluation of the programme. Based on 46 semi-structured group interviews with local project stakeholders, we produced a list of assumptions about what health promotion for vulnerable families should look like and then identified five main clusters: (i) strategies of offering pre-defined, health (behaviour)-related activities to families, (ii) actively involving vulnerable families in the initiative, (iii) assumptions about how health promotion should start with or include non-health-related topics, (iv) assumptions on how one should build on what already exists in the local context of the families and (v) assumptions on the role of the (health) professional in health promotion among vulnerable families. These project interpretations of effective health promotion provide inputs and priorities for the HFN programme's overall evaluation.

Key words: community, health behaviour, evaluation, inequalities, health

INTRODUCTION

Nation-wide programmes or policies are often designed to promote the health of vulnerable groups and thereby reduce health inequality; however, the persistence of health inequality in high-income countries stresses the need for evaluation of such programmes and initiatives. Learning what works, in what way and for whom is crucial for future actions related to health disparities. Over the last few decades, health promotion programmes have often typically been designed as multiple project programmes (MPP). Such programmes—in which multiple (local) projects are included and/or funded under the aim of one central programme (Kniefel, 1973; Brown and Knopp, 2014)—allow for diversity through its funding scheme and facilitate a relatively large role for stakeholders from civil

society and (through that) the participation of vulnerable groups in the design and implementation of activities (Bekker *et al.*, 2017). Moreover, these MPPs often take on a particular approach, such as an multi-sectoral approach (Storm *et al.*, 2014) or a community participation approach (Wold and Mittelmark, 2018; Woodall *et al.*, 2018). In the Netherlands, the private funding organization, FNO, funded 46 small-scale projects under the umbrella of the Healthy Futures Nearby (HFN) programme (FondsNutsOhra, 2015) and issued an overall evaluation of the programme to learn about participation, effectiveness and sustainability. The projects all aim to reduce health inequalities through lifestyle changes in vulnerable families.

There are, however, multiple issues one may encounter in the evaluation of such MPPs. We previously elaborated on the main challenges of such programmes and the ways we will address these in the design of the overall evaluation of the HFN programme (Hogeling *et al.*, 2019). In this article, we elaborate on two of these challenges. First, the evaluation of health-related MPPs must fit the complexity of the programme under study. Others have successfully argued that such complexity challenges the use of more traditional, reductionist evaluation approaches (Kok *et al.*, 2012). We address this challenge by conducting a theory-driven evaluation (Rogers, 2000, 2008; Stame, 2004; Westhorp, 2012, 2013). Secondly, the scale and diversity of MPPs challenge the connection between practice-based input and priorities and programme-level results. Studying an MPP highlights the local contextual differences that influence its implementation and results. This is addressed by collecting and analyzing both practice-based and scientific input to identifying the expectations and assumptions in the programme and set priorities for the evaluation (Weiss, 1997; Birckmayer and Weiss, 2000). In other words, we use 'local' interpretations of effective health promotion to prioritize the topics for evaluation.

Complexity and theory-driven evaluation

Many MPPs promote a multi-sectoral approach to reduce health inequalities (Storm *et al.*, 2014; Hogeling *et al.*, 2019). Furthermore, programmes often focus on the comprehensive set of determinants of health (WHO, 1986). Such programmes have been characterized as being complex (Nutbeam, 1998; Glouberman and Zimmerman, 20016; Pawson, 2004; Stame, 2004; Rogers, 2008; Westhorp, 2012; Jolley, 2014; Brousselle and Buregeya, 2018; Moore *et al.*, 2019). These programmes anticipate health-related changes in varying (social) settings, which by definition involves the interaction of the initiatives with varying contexts at multiple levels and involving multiple stakeholders. Complexity is often perceived as a challenge when it comes to evaluation (Pawson, 2004; Stame, 2004; Douthwaite *et al.*, 2017; Moore *et al.*, 2019); however, complex systems potentially also comprise a lot of relevant information about health-related change in social settings. This could be assessed through the design and use of suitable evaluations.

We adopted a theory-driven approach for the evaluation of the HFN programme (Chen, 1990; Weiss, 1995; Van Belle *et al.*, 2010; Hogeling *et al.*, 2019). A theory-driven evaluation can be understood as an evaluation in which the selection of programme features for evaluation is determined by an explicit conceptualization of the programme in terms of a theory (Fitz-Gibbon and Morris, 1996). Such conceptualizations are often called the theory of change or *programme theory*, and comprise a set of assumptions (or theories) about how the programme works and how the programme produces the desired effects (Fitz-Gibbon and Morris, 1996). This *programme theory*—we will use this terminology hereafter—is the core of the evaluation (Rogers *et al.*, 2000). During the evaluation, one tests the assumptions and relationships laid out in the defined programme theory, which should result in its improvement (Van Belle *et al.*, 2010).

Theory-driven evaluations enable the identification of priorities for evaluation, facilitates learning and thereby support the evaluation of complexity (Connell *et al.*, 1995; Weiss, 1995, 1997; Birckmayer and Weiss, 2000). It also allows for the possibility of identifying important common themes across cases, promoting cross-programme discoveries (Pawson and Tilley, 1997; Dunn *et al.*, 2013). Moore *et al.* argued that the evaluation of interventions in complex social systems is inevitably (Moore *et al.*, 2019) not comprehensible due to the extensive nature of all possible changes and mechanisms at work. As a consequence, choices must be made in the focus of the evaluation. Identifying key issues and priorities is thus crucial for the informative evaluation of the HFN programme. The first stage of a theory-driven evaluation can be to develop a programme theory to frame and guide the evaluation (Weiss, 1995, 1997), which we will initially develop and present as a list of assumptions present in all projects under the umbrella of the HFN programme.

Local interpretations of effective health promotion

Developing a programme theory for a specific initiative is ideally a process that involves all relevant stakeholders (Van Belle *et al.*, 2010). Chen argued that, instead of

using only scientific theoretical sources (Chen, 1994, 1990), 'important sources for constructing programme theory come from stakeholder groups, especially programme designers and implementors'. The involvement of stakeholders in the development of a programme theory guarantees that the (implicit) theories and assumptions held in their minds regarding how health-related change works are taken into account in the evaluation framework. Moreover, involving all stakeholders in theory-based evaluations asks professionals to 'make their assumptions explicit and to reach consensus with their colleagues about what they are trying to do and why' (Weiss, 1995). From our experience in evaluation of community projects, we argue that the involvement of the local stakeholders in developing a programme theory—or more specifically, in deciding what the focus of the research should be—may enhance the relationships between the community (health), professionals and researchers. Also, the involvement of all promotes learning in everyone involved.

Overall evaluation of the HFN programme

Under the umbrella of the HFN programme, 46 small-scale projects were funded to promote a change in health-related behaviors (smoking, alcohol, diet and exercise) and improve perceived health among vulnerable families in the Netherlands. The target group was defined by the funder as a household, consisting of at least one parent and one child, which has multiple problems in the field of finance, education, labour or wellbeing. Besides this, the household members suffer health deprivation through smoking, consuming high levels of alcohol or being overweight, combined with lower levels of perceived health (FondsNutsOhra, 2015). Additionally, funding by the HFN programme required all projects to adopt a community (participatory) and/or integral approach. Supplementary Appendix A includes a schematic overview of the programme. A literature review provided further inputs for project proposals on what could be the effective elements in reducing health disparities among vulnerable families (Beenackers *et al.*, 2015).

A diverse group of stakeholders are involved in the 46 projects. Most of them belong to one of the following groups: family members, volunteers, practitioners and other health professionals, civil society organizations and professionals working in the communities such as teachers, researchers and municipal officials.

All 46 individual projects were asked to conduct an evaluation of their effectiveness in terms of the funder-defined outcomes. A consortium was commissioned to perform the overall evaluation of the HFN programme. The main aim of the overall evaluation is to 'provide insights in the effects and factors of success and failure of the funded projects and the programmes activities' (FondsNutsOhra, 2015). Desired project outcomes were specified as a reduction of the risky health-related behaviours smoking, a high consumption of alcohol or being overweight, combined with having a lower perceived health. These four indicators could be interpreted as the main pre-defined outcomes of the programme, whereas the participatory and integrated elements can be seen as the programme's strategies.

Aim and research question

The main aim of this study is to provide input for the development of a programme theory that can serve as a framework for the overall evaluation of the HFN programme. Given the diverse and flexible nature of the programme and the goals of the evaluation, this programme theory should be based on project interpretations, and contain sufficient detail at multiple levels, but at the same time cannot be exhaustive and must enable the prioritization of topics for further in-depth study. Assumptions on what works exist at different levels and may be contradictory to each other, for instance, in one project, group sessions providing knowledge about healthy eating are assumed to work for vulnerable families, while in another project it is assumed that healthy eating is best learned through individual counselling trajectories for families. The assumptions reflect the knowledge and experience of the stakeholders. Analysis of this list will reveal clusters of what they believe to be effective health promotion.

The main research question is: *what are the interpretations of effective ways to promote change in health-related behaviours and improve perceived health among vulnerable families within the 46 projects in the HFN programme?*

METHODS AND PROCEDURE

Data collection

To collect data, at the start of each project, 46 group interviews were held using the *EffectenArena* approach (Deuten, 2009; Unknown, n.d). This semi-structured approach for group interviews ensures a discussion that is insightful to the researchers in terms of activities, outcomes, conditions, investors and beneficiaries; the main elements of the structured discussion. It facilitates an open, informative discussion between stakeholders and thereby promotes learning and dialogue within the teams. Participation in the group interviews within the

projects was based on convenience sampling; the project leaders were asked to invite all stakeholders or representatives. This resulted in a variety of stakeholders taking part, including project leaders, health care and welfare professionals, educators, members of sports clubs and neighbourhood organizations, family members, researchers and volunteers. For a substantial number of projects, it was difficult to involve participants from vulnerable families. In total, more than 330 people participated in the group interviews, with a mean group size of 7 (range 4–17). The interviews lasted 2–3 hours, and took place at a location chosen by the project leaders and often close to where the projects are implemented.

Each group interview was facilitated by one researcher, while another took detailed notes. These notes were used afterwards to write a comprehensive report (3–5 pages) of the interview following the *EffectenArena* format. In addition, the researchers drafted a flow diagram representing the main elements, processes and expected results of each project. Supplementary Appendix B shows one of the diagrams made to represent the project's strategies. Both the comprehensive report and the diagram were presented to the project leader, who was asked to reflect on the accuracy of the documents.

Procedure and data analyses

Using interpretive content analysis (Drisko and Maschi, 2016), firstly mixed (but primarily deductive) coding of the interview reports was conducted to identify the stakeholders' assumptions on how the projects work. A code list was drafted, with codes for expectations about activities, but also to mentions of more abstract factors, such as to the conditions involved and details of how, when and where the activities were to be implemented. In an initial test round, three researchers (L.H., C.L. and L.V.) coded the reports from two projects using the draft code list and the explanation of the coding process. In a discussion between the researchers, the code list was discussed and codes were verified.

All group interview reports were then independently coded by two researchers (C.L. and L.H.). Discussions between the researchers were again used to verify the codes and check for differences in their interpretation. We thus developed a list of coded expectations for each project, a list of assumptions on how each project activity and condition would work.

Our next step was to distinguish whether similar assumptions exist between the different projects. Three methods were used to summarize the complete list of identified assumptions into relevant clusters. (i) Discussions between the researchers involved led to an on-the-go clustering of the assumptions. (ii) These clusters were presented to the projects' stakeholders in a programme meeting, who were asked to reflect upon the clusters identified and the position of their project among the clusters. To further refine the findings, two researchers (L.H. and C.L.) analyzed the list of phrases derived from the interview reports to check for additional assumptions and possible clusters. (iii) The initial list of assumptions was presented in an expert meeting of health promotion scientists. The participants ($n = 8$) were asked to reflect on the list in terms of what they identified as relevant clusters based on their knowledge of health promotion theory and practice. Given the diverse nature of the assumptions, the scientists input was valuable to reflect upon and further refine the clusters identified by the researchers involved.

RESULTS

The reports from the 46 group interviews were analyzed to gain an understanding of the (implicit) assumptions (see Supplementary Appendix C). This list reveals that the 46 projects each involve specific assumptions on how to reach their associated health-related goals. Several projects had similar assumptions about what works and most projects were based on more than one assumption. We identified five main clusters: (i) assumptions about offering pre-defined, health (behavior)-related activities to families, (ii) assumptions about actively involving vulnerable families in the initiative, (iii) assumptions about how health promotion should start with or work via a focus on non-health-related topics and issues; first things first, (iv) assumptions about using and strengthening the local context of the families and (v) assumptions about tailoring practices of (health) professional promotion among vulnerable families (see Supplementary Appendix D). In addition, we identified assumptions on the topic of establishing contact with and supporting the participation of vulnerable families, which could be seen as an overall prerequisite for the other strategies. For all clusters, we find that assumptions relate to (intermediate) outcomes. Active family involvement, improvement of non-health-related issues or changes in the role of the professional or the local context are often perceived as short-term or proxy outcomes and are distinct from the long-term health-behavioral and health outcomes. Also, stakeholders mention assumptions that relate to methods, indicating *how* they work in the different projects.

Pre-defined health-related activities

This cluster (present in 40 of 46 projects) includes more 'traditional' or pre-defined approaches to health promotion interventions. Two different aspects are combined within this cluster: project teams organizing and offering one or more pre-defined activities to families in a specific setting, often related to lifestyle (exercise/sports, food, help to quit smoking and/or drink less alcohol), or project teams offering more targeted trajectories to specific families (individual) or groups of families. Those trajectories also often relate to lifestyle changes or to improved wellbeing.

> (...) The intervention consists of thematic sessions on health-related skills for the families, a buddy system and motivational interviewing by the social workers

> Easy accessible programmes for smoking cessation are offered in the community centre

Active family involvement

Thirty-eight of the 46 projects mention the active involvement of the family in the project, with involvement being defined as anything more than family members being 'only' participants in pre-defined project activities. Within this category, we distinguish three main types of involvement: (i) following family-defined priorities in the design and organization of activities by the project team; (ii) various forms of the involvement of family members in the design, organization and/or execution of activities; and (iii) the recruitment and training of volunteers from the target population (ambassadors strategy). These three forms of involvement are outlined below.

Following family defined health priorities

In 25 projects, the stakeholders mentioned that the project activities were not yet clear, and would be designed based on the needs of the families involved. Some project teams stated they were first collecting data among the target populations then choosing activities based on the needs of those groups. Other projects targeted families individually and, together with the family, drafted a tailored plan based on the family's needs. Project teams mentioned multiple reasons for basing the activities on family-defined health priorities, stating that it could raise support (ownership) among families for a specific plan or set of activities, enabled activities to be tailored to a specific context, and may yield more participants for the activities. The following quote illustrate how some projects take families' needs into account:

> Each school has or organises a children's council. This council discusses and decides which activities will be organised. Specific activities are thus not yet clear

Active family involvement

The active involvement of families ranges from highly participatory strategies, in which working groups of family members, neighbourhood inhabitants or patients design, organize and execute activities, to 'participation light' projects, in which focus groups or co-creation sessions are used to inform the subsequent work of the project teams. This is illustrated by the following quote from a group interview:

> Together, the initiator and the inhabitants [of a specific neighbourhood] will independently implement their ideas and initiate activities but will be supported by the project if needed

Recruitment and training of volunteers: ambassadors strategy

A somewhat different strategy in this category is the involvement of ambassadors or community workers, central figures in a specific setting (a neighbourhood, a school and cultural/ethnic community) that may be trained by the project and play an important role in getting families involved in the project and the organization and execution of activities. In some projects, ambassadors are trained to become trainers in a specific activity. In others, ambassadors are used merely for their networks in the community or to execute the lifestyle activities designed by professionals. The different roles and responsibilities that these central figures have are illustrated in the following quotes from the group interviews:

> Community builders have an important role in the recruitment of possible participants

> The ambassadors have a crucial role. As inhabitants of the neighbourhood, their faces are familiar, which increases their chances of reaching vulnerable families, thinking about health-related goals with them, and involving them in activities"

First things first

Out of the 46 projects, 32 involved assumptions that focussed on issues not directly related to health-related behaviour or perceived health. This is often presented as a 'first things first' approach, and includes the prioritization of problems that need to be solved before any other issues may be addressed, such as debt and other financial

problems, housing issues and unemployment. It can also incorporate a focus on solving issues very close to but not directly associated with health, such as stress, loneliness and social isolation. This cluster also includes the implementation of a different, more positive perspective by working from or looking for talents, dreams and fun instead of taking problems as a starting point. In the projects included in this cluster, health is often a more implicit outcome, especially for participating families. The improvement of healthful behaviour is seen as a long-term outcome by the project teams. The quote below illustrates these findings:

> The idea for this course lies in the observation that discussions around health often focus on survival: surviving poverty, poor housing conditions, or family problems. The target group needs control over their lives, and their fundamental needs must be met. Only then can one take the step to a healthier life

Using and strengthening the local context

Of the 46 projects, 42 explicitly mentioned assumptions that involve the use or strengthening of existing professional networks, facilities and organizations already located in the community, or the use of existing organized activities. Many projects therefore use these existing elements, but the way in which they are incorporated differs. Often, project activities are embedded in schools, (neighbourhood) community centres, health centres and so on. One stakeholder said:

> To reach the intended participant numbers, a collaboration was set up with an existing re-integration programme run by the municipality. Some people in this programme will be obliged to take part in the intervention

In some cases, the main approach is to create ways for families and professionals to better find existing activities and facilities. This includes improving the visibility of relevant activities and organizations and creating awareness about those activities among families. In other projects, the focus is more on improving networks of professionals and the health (care) and welfare organizations in a certain neighbourhood or community. Often, such projects include a central coordinator or similar figure.

> Using what already exists is the basic idea of our project. The problems of the existing activities are the limited number of activities on offer related to physical activity and the affordability of these activities. We will not make existing activities cheaper, but can add extra activities and direct people to resources such as available funds for children and sports [het Jeugdsportfonds]

> The community worker's role is to map the practitioners in the neighbourhood and their role. This will enable a better match between the family's initiatives and professional organisations

Tailoring practices of (health) professionals

Over half (27) of the 46 project teams hold assumptions that are related to a change in practices of health professionals. These projects often include the training of involved professionals, either by offering official training/workshops, organizing peer learning groups with colleagues, learning by doing (training on the job) or learning by experience (co-operating with families to change professional practices). What these professionals should learn varies between the projects. Some focus on recognizing vulnerability (low literacy, social isolation) among families, while others focus on changing their approach, for instance working through appreciative inquiry. Often, projects aim to make professionals aware of a certain health-related topic, resulting in a change of practices.

> Professionals need support, for example training in motivational interviewing. How should you discuss the issue of smoking (and quitting smoking) with families?

Additional assumptions: the pre-condition of establishing contact with vulnerable families

In our analysis, we found a category of assumptions is not specifically about 'what works in health promotion for vulnerable families', but which does seem important. Many (21) projects mentioned specific assumptions related to establishing contact with families encouraging participants to remain involved and/or to participate. Some project teams have originated from or work together with, a professional sports club, such as a soccer team. The teams assume that the connection between the sports club and the project activities will attract families and may convince them to participate. Other projects have included specific incentives in their plans to get families to participate and/or to stay involved, or seem to rely on professionals working in the neighbourhood for recruitment. Whatever the (underlying) assumption for successfully establishing contact may be, it may very much influence the success of the project activities.

> The team is thinking of ways to reduce barriers for participation and about what appears to work well already, such as personal contact with possible participants and offering a €50 reimbursement for participation

The involvement of well-known soccer players is seen as an important motivation for the families to participate

The involved practitioner will check whether the woman meets the criteria for inclusion in the project. If this is the case, she will be informed about the project and invited for an introduction to the project by the practitioner

Project teams vary in how and to what extent attention is paid to the issue of establishing contact with families. Some projects have clearly discussed, or are still thinking of, the most effective ways to involve vulnerable families, whereas others do not mention any specific assumptions about this. Some seem to rely strongly on collaboration with (local) professionals and other intermediaries for involving families. Successful strategies to reach those families can be considered a prerequisite for the further implementation of the projects.

In Figure 1, the results are summarized.

DISCUSSION

The main aim of this study was 'to provide input for the development of a programme theory that can serve as a framework for the overall evaluation of the HFN programme'. We were able to unravel the complexity of the programme and its context and to identify the areas on which we should focus the evaluation, which was identified as a first challenge for the research. This enables us to optimize the practical and scientific relevance of the evaluation. A wide variety of ideas about perceived effective health promotion among vulnerable families was collected from the stakeholders of the projects, with ideas ranging from a series of pre-defined health-related activities leading back to behaviour change theories to projects advocating participatory approaches. This is in line with what Davidoff *et al.* mention that inspiration for the design of projects most likely comes (Davidoff *et al.*, 2015) from academic sources as well as practice, personal experience and intuition. This shows the value of involving stakeholders (and their ideas) in the creation of a programme theory.

Our results show that integration of practitioners and families' opinions and experiences—besides only expert opinions—provides a much wider and probably more realistic framework for the design and evaluation of health promotion programmes. Moreover, the specific themes addressed by practitioners and families, may help future programmes to overcome implementation difficulties.

A second challenge lies in the local contextual differences that influence the implementation and results of MPPs. This was addressed by incorporating a structured and ongoing process of collecting, analyzing and using both practice-based and scientific input for development of the programme theory for the evaluation. The ideas

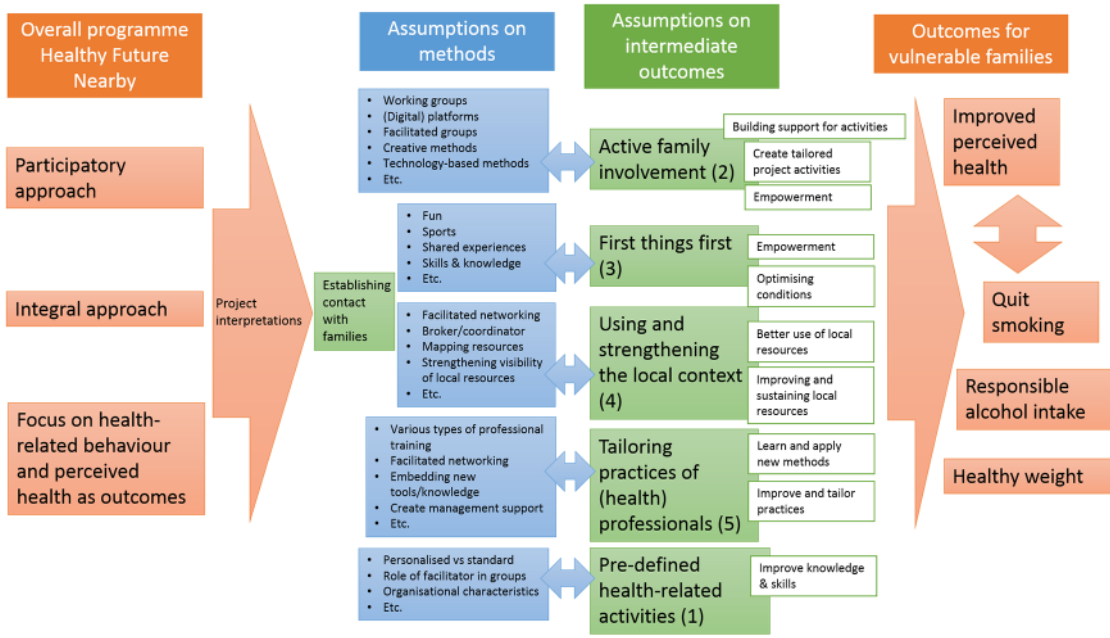

Fig. 1: Summary of results.

that were collected among stakeholders are translated into a programme theory, but this must be seen as a flexible and dynamic base. Over the course of the evaluation, inputs will be collected from stakeholders and used to adjust and improve the initial programme theory where necessary. Others have argued that making (theoretical) assumptions among stakeholders explicit at the start of projects may also enhance learning and effectiveness (Huebner, 2000; Rogers *et al.*, 2000).

All assumptions could be summarized into five clusters, which provide clear priorities for the further evaluation of the programme. In the rest of this study, we will focus our evaluation on exploring what works and how it works, in the context of the projects, when (i) offering pre-defined health (behaviour)-related activities, (ii) actively involving families in the initiative (participatory strategies), (iii) having a wider focus that includes non-health topics, (iv) building on facilities and structures present in the local context and (v) when changing the role of the (health) professional to promote health among vulnerable families. These clusters serve as input for the evaluation, but are not seen and used as *success indicators* in the evaluation. Rather, they are seen as focus points, that were used in the evaluation to decide which strategies and themes should have priority in a more in-depth investigation of processes and mechanisms. Also, they provide information on which health promotion strategies and themes are perceived as important and/or promising by project stakeholders.

Analyzing programme theory can provide evaluators and funders with useful information. Mayne explains that if one (Mayne, 2017) finds that a set of assumptions is not very robust, this might be supporting in explaining a less than successful intervention. In case of the HFN programme, analysis of the project assumptions has helped identifying issues that evaluation should focus on and has provided the funder with a framework of realistic expectations about results. Moreover, the results of our analysis supported the funder to retain a flexible attitude when assessing project development. We have experienced over the years that the results of this study have been very informative for the evaluation, and moreover, has supported the funder in understanding and explaining unexpected results.

An integral or multi-sectoral approach was promoted as being favourable by the funder, together with a focus on (community) participation; however, neither concept was very clearly defined by funder at the outset. All projects appear to rely on combinations of assumptions. Some combine an offer of pre-defined health-related activities with building stronger networks and facilities by building on pre-existing initiatives, some have a community participation phase followed by health-related activities, some combine a focus on non-health topics with pre-defined health-related activities and so on. Harting et al. described such integrated interventions as an intervention mix (Harting *et al.*, 2019). Given the range of ideas and combinations, and the somewhat flexible instructions provided by the funder on this matter, it remains challenging to conclude whether projects have adopted a desired approach.

It was often difficult for project leaders to involve (vulnerable) families or project participants in the groups interviews. This may be partially due to the timing of the sessions, which took place at the start of the programme, when the actual involvement of participants may not yet have been on the agenda of some projects. However, establishing and maintaining contact with vulnerable families appeared to be a more general challenge in the projects. In the group sessions, the foreseen or encountered difficulties in reaching and involving vulnerable families or the vulnerable inhabitants of the neighborhoods were often perceived as a matter of concern. Reaching and involving vulnerable families is a prerequisite for effective health promotion. What we take from this in our evaluation is that, next to a focus on the five idea clusters, an additional priority for our research should be to collect information about effective strategies for involving vulnerable families.

STRENGTHS AND LIMITATIONS

The first strength of this study is that we have succeeded in making explicit and categorizing the (underlying) assumptions of the very diverse group of projects. The list of assumptions and the five identified clusters offer usable guidance for the programme evaluation. We believe that another valuable aspect is that, in clarifying and summarizing project interpretations, we remained close to actual project practices. Related to that, we believe that another strength lies in the design of this study; conducting 46 group interviews instead of simply coding the initial project proposals. This has provided a lot of valuable information on the underlying and often implicit assumptions.

One limitation of our study is the range and diversity of the projects in the programme. The programme potentially holds so much information that it is impossible to study everything in-depth in one overall evaluation. Of course, this is first and foremost an advantage of this research. By identifying what the projects teams want and actually achieve in the first year (this study), and building our programme theory on that information, we were able to prioritize topics for the later evaluation.

The programme and projects hold more project-specific information, however, in our study, we decided to focus on the overall, programme level and cross-projects analysis.

The second, related, limitation concerns flexibility. Not working from a highly structured, pre-defined or more experimental set up will yield results that could be perceived as vague and not fit for generalization. A challenge for the research team thus lies in the very careful, accurate and precise interpretation and dissemination of research findings.

CONCLUSION

The main aim of this article was to provide practice-based inputs for the development of a programme theory that can serve as a framework for the subsequent evaluation of a Dutch health-promotion programme. We were able to identify five clusters of ideas for health promotion among vulnerable families. These ideas form the core of our flexible programme theory, which will be refined and adjusted during the remaining years of the evaluation. A theory-based approach thus enabled us to identify common strategies and themes (Dunn *et al.*, 2013) across what first seemed to be a collection of very diverse and different projects. It also enabled us to identify priorities (Moore *et al.*, 2019) for the shaping of the overall evaluation. Furthermore, it became clear that most HFN projects combine multiple strategies. The overall evaluation will be framed by the results of this study in at least two ways; the identified strategies will be used as directions for in-depth multiple case studies and as factors for explaining effectiveness in MPPs. In other words, the results of this study can be used to deal with the complexity encountered in the overall evaluation of the HFN programme (Elliott *et al.*, 2014; Brousselle and Buregeya, 2018).

SUPPLEMENTARY MATERIAL

Supplementary material is available at *Health Promotion International* online.

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ETHICS INFORMATION

According to Dutch law, this study did not require formal ethics committee approval. However, special attention is paid in all activities to inform respondents and protect their privacy. All participants are provided with information about the purpose and contents of the research. Participation is voluntarily, and participants are able to withdraw from the study at any time for any reason. The collected data are treated confidentially and anonymously.

REFERENCES

Beenackers, M. A., Nusselder, W. J., Groeniger, J. O. and Lenthe, F. J. V. (2015) *Het Terugdringen Van Gezondheidsachterstanden: Een Systematisch Overzicht Van Kansrijke en Effectieve Interventies*. Erasmus MC Universitair Medisch Centrum Rotterdam, Rotterdam, Netherlands.

Bekker, M., Helderman, J. K., Jansen, M. and Ruwaard, D. (2017) The conditions and contributions of "Whole of Society" governance in the Dutch "All about Health…" programme.*Civil Society and Health*, 159.

Birckmayer, J. D. and Weiss, C. H. (2000) Theory-based evaluation in practice: what do we learn? *Evaluation Review*, **24**, 407–431.

Brousselle, A. and Buregeya, J.-M. (2018) Theory-based evaluations: framing the existence of a new theory in evaluation and the rise of the 5th generation. *Evaluation*, **24**, 153–168.

Brown, M. and Knopp, L. (2014) The birth of the (gay) clinic. *Health & Place*, **28**, 99–108.

Chen, H.-T. (1990) *Theory-Driven Evaluations*. Sage, Newbury Park, CA.

Chen, H.-T. (1994) Theory-driven evaluations: need, difficulties, and options. *Evaluation Practice*, **15**, 79–82.

Connell, J. P., Kubisch, A., Schorr, L. and Weiss, C. (1995) *New Approaches to Evaluating Community Initiatives. Concepts, Methods and Contexts*. The Aspen Institute, Washington DC.

Davidoff, F., Dixon-Woods, M., Leviton, L. and Michie, S. (2015) Demystifying theory and its use in improvement. *BMJ Quality & Safety*, **24**, 228–238.

Deuten J. (2009) Gebruikershandleiding EffectenArena. Hilversum, Rotterdam: Aedes, SEV. https://docplayer.nl/8594875-Gebruikershandleiding-effectenarena.html.

Douthwaite, B., Mayne, J., McDougall, C. and Paz-Ybarnegaray, R. (2017) Evaluating complex interventions: a

theory-driven realist-informed approach. *Evaluation*, **23**, 294–311. 10.1177/1356389017714382.

Drisko, J. and Maschi, T. (2016), *Content Analysis*, Oxford University Press, Oxford.

Dunn, J. R., van der Meulen, E., O'Campo, P. and Muntaner, C. (2013) Improving health equity through theory-informed evaluations: a look at housing first strategies, cross-sectoral health programs, and prostitution policy. *Evaluation and Program Planning*, **36**, 184–190.

Elliott, M., Harrington, J., Moore, K., Davis, S., Kupeli, N., Vickerstaff, V. *et al.* (2014) A protocol for an exploratory phase I mixed-methods study of enhanced integrated care for care home residents with advanced dementia: the compassion intervention. *BMJ Open*, **4**, e005661.

Fitz-Gibbon, C. T. and Morris, L. L. (1996) Theory-based evaluation. *Evaluation Practice*, **17**, 177–184.

FondsNutsOhra. (2015) Call "Gebiedsgerichte gezondheidsaanpakken – fase 1" voor Programma Gezonde Toekomst Dichterbij, Amsterdam.

Glouberman, S. and Zimmerman, B. (2016) .Complicated and Complex Systems: What Would Successful Reform of Medicare Look Like?. In P. Forest, G. Marchildon & T. McIntosh (Ed.), Changing Health Care in Canada (pp. 21-53). Toronto: University of Toronto Press. https://doi.org/10.3138/9781442672833-004

Harting, J., Peters, D., Grêaux, K., van Assema, P., Verweij, S., Stronks, K. *et al.* (2019) Implementing multiple intervention strategies in Dutch public health-related policy networks. *Health Promotion International*, **34**, 193–203.

Hogeling, L., Vaandrager, L. and Koelen, M. (2019) Evaluating the Healthy Futures Nearby program: protocol for unraveling mechanisms in health-related behavior change and improving perceived health among socially vulnerable families in the Netherlands. *JMIR Research Protocols*, **8**, e11305.

Huebner, T. A. (2000) Theory-based evaluation: gaining a shared understanding between school staff and evaluators. *New Directions for Evaluation*, **2000**, 79–89.

Jolley, G. (2014) Evaluating complex community-based health promotion: addressing the challenges. *Evaluation and Program Planning*, **45**, 71–81. 10.1016/j.evalprogplan.2014.03.006.

Kniefel, T. M. (1973, February) A formative-summative evaluation design for a state-sponsored program of educational experimentation [Paper presentation]. Annual Meeting of American Educational Research Association, New Orleans, Louisiana.

Kok, M. O., Vaandrager, L., Bal, R. and Schuit, J. (2012) Practitioner opinions on health promotion interventions that work: opening the 'black box' of a linear evidence-based approach. *Social Science & Medicine*, **74**, 715–723.

Mayne, J. (2017) Theory of change analysis: building robust theories of change. *Canadian Journal of Program Evaluation*, **32**, 155–173.

Moore, G. F., Evans, R. E., Hawkins, J., Littlecott, H., Melendez-Torres, G. J., Bonell, C. *et al.* (2019) From complex social interventions to interventions in complex social systems: future directions and unresolved questions for intervention development and evaluation. *Evaluation*, **25**, 23–45.

Nutbeam, D. (1998) Evaluating health promotion—progress, problems and solutions. *Health Promotion International*, **13**, 27–44.

Pawson, R. (2004) Simple principles for the evaluation of complex programmes. *CIDADES, Comunidades e Territórios, 8, 95-107*.

Pawson, R. and Tilley, N. (1997) *Realistic Evaluation*. Sage, London.

Rogers, P. J. (2000) Causal models in program theory evaluation. *New Directions for Evaluation*, **2000**, 47–55.

Rogers, P. J. (2008) Using programme theory to evaluate complicated and complex aspects of interventions. *Evaluation*, **14**, 29–48.

Rogers, P. J., Petrosino, A., Huebner, T. A. and Hacsi, T. A. (2000) Program theory evaluation: practice, promise, and problems. *New Directions for Evaluation*, **2000**, 5–13.

Stame, N. (2004) Theory-based evaluation and types of complexity. *Evaluation*, **10**, 58–76.

Storm, I., van Koperen, M., van der Lucht, F., van Oers, H. and Schuit, J. (2014) Monitoren en evalueren van integraal gezondheidsbeleid. *Beleidsonderzoek Online*, **2014**.

Unknown (n.d.). "Effectenarena." Retrieved 7/1/2021, 2021, from https://instrumentwijzer.nl/effectenarena.

Van Belle, S. B., Marchal, B., Dubourg, D. and Kegels, G. (2010) How to develop a theory-driven evaluation design? Lessons learned from an adolescent sexual and reproductive health programme in West Africa. *BMC Public Health*, **10**, 741–741.

Weiss, C. H. (1995) Nothing as practical as good theory: exploring theory-based evaluation for comprehensive community initiatives for children and families. *New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts*, **1**, 65–92.

Weiss, C. H. (1997) Theory-based evaluation: past, present, and future. *New Directions for Evaluation*, **1997**, 41–55.

Westhorp, G. (2012) Using complexity-consistent theory for evaluating complex systems. *Evaluation*, **18**, 405–420.

Westhorp, G. (2013) Developing complexity-consistent theory in a realist investigation. *Evaluation*, **19**, 364–382.

WHO. (1986) The Ottawa Charter for Health Promotion. http://www.who.int/healthpromotion/conferences/previous/ottawa/en/.

Wold, B. and Mittelmark, M. B. (2018) Health-promotion research over three decades: the social-ecological model and challenges in implementation of interventions. *Scandinavian Journal of Public Health*, **46**, 20–26.

Woodall, J., Warwick-Booth, L., South, J. and Cross, R. (2018) What makes health promotion research distinct? *Scandinavian Journal of Public Health*, **46**, 118–122.