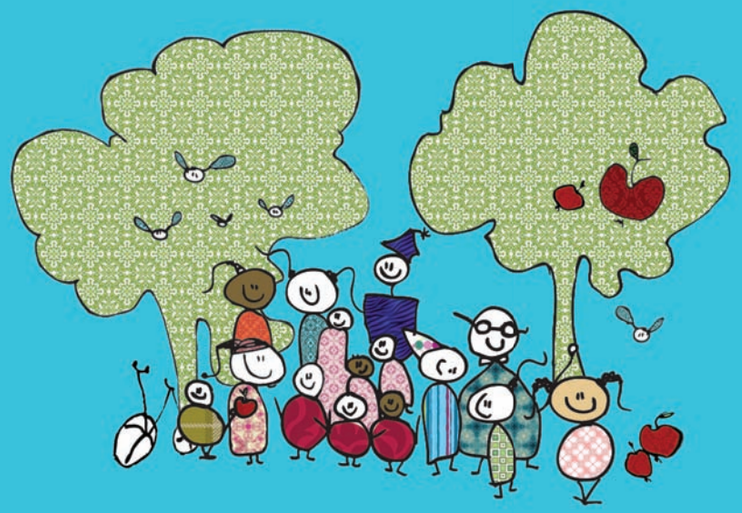


Community health promotion Facilitating and evaluating coordinated action to create supportive social environments Annemarie Wagemakers

Community health promotion

Facilitating and evaluating coordinated action to create supportive social environments

Annemarie Wagemakers

Community health promotion

Facilitating and evaluating coordinated action to create supportive social environments

Annemarie Wagemakers

Thesis Committee

Thesis supervisor

Prof.dr.ir. Cees Leeuwis	Professor of Communication and Innovation Studies, Wageningen University

Thesis co-supervisors

Dr. Maria Koelen	Associate Professor, sub-department Communication Science, Wageningen University
Dr.ir. Lenneke Vaandrager	Associate Professor, Health and Society group, Wageningen University

Other members

Prof.dr. P. van 't Veer	Wageningen University
Prof.dr. K. Stronks	Academic Medical Centre, University of Amsterdam
Dr. L. Kennedy	Glyndŵr University, School of Health, Social Care and Sport and Exercise Sciences, Wales, United Kingdom
Prof.dr. B. Lindström	Folkhälsan Research Center, Helsinki, Finland

This research was conducted under the auspices of the Mansholt Graduate School of Social Sciences.

Community health promotion

Facilitating and evaluating coordinated action to create supportive social environments

Annemarie Wagemakers

Thesis

submitted in fulfilment of
the requirements for the degree of doctor
at Wageningen University
by the authority of the Rector Magnificus
Prof.dr. M.J. Kropff,
in the presence of the
Thesis Committee appointed by the Academic Board
to be defended in public
on Friday 23 April 2010
at 1.30 PM in the Aula

Wagemakers, Maria Anna Elisabeth
Community health promotion
Facilitating and evaluating coordinated action to create supportive social environment
192 pages

Thesis Wageningen University, Wageningen, The Netherlands (2010)
With references, with summaries in Dutch and English

ISBN 978-90-8585-630-6

Voor Ria en Martijn

Abstract

Introduction

Community programs to promote health have been launched all over the world and fit well with Dutch policy that emphasizes the participation of all citizens in all facets of society. However, researchers, practitioners, and policy makers report uncertainty about how to implement and evaluate health promotion programs. In particular, the social environment of health is still overlooked and underexposed due to a lack of consensus on concepts relating to the social environment of health, a lack of information on interventions that bring about social change, and a lack of feasible methods and tools. Consequently, the effectiveness of health promotion may not be evaluated under all relevant headings.

Methods

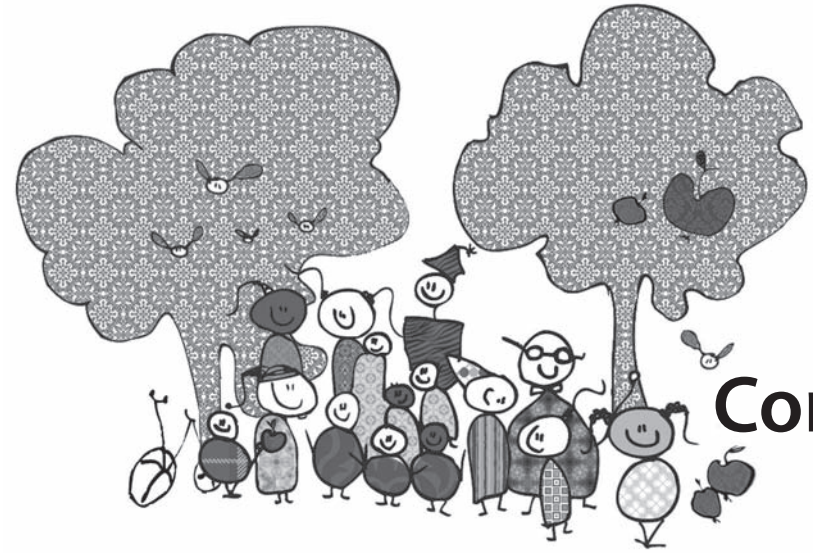
The aim of the studies reported in this thesis was to gain the required knowledge to contribute to the development of methods, tools, and theory to facilitate and evaluate community health promotion. Case studies have been selected that are guided by action research or in which action research was part of the research activities. Methods, tools, and theory have been developed, piloted, and evaluated simultaneously and iteratively in the Eindhoven program *Working on Healthy Neighborhoods* and the *Healthy Lifestyles* program in Amsterdam. Based on these case studies and the experiences in other Dutch community health programs, factors that are important in community health promotion were identified and a framework to facilitate and evaluate the social environment of health was developed. Based on the factors and the framework a Checklist for Coordinated Action was developed and assessed for usability in six different partnerships: a national program, an academic collaborative and four local partnerships.

Results

In the Eindhoven program the participatory action research facilitated the restart and continuation of the program, the achievement of intersectoral collaboration, the initiation of community participation, and other accompanying research. In the Amsterdam program, participatory approaches facilitated the participation of 15% of the target population at the desired level in the different phases of the program. The factors important in community health promotion are representation of relevant societal sectors, discussing aims, objectives, roles and responsibilities, communication infrastructure, visibility and management. These factors helped to develop a framework and guidelines which offer operational variables of participation and collaboration and thereby provide common ground for researchers and practitioners. The developed Checklist for Coordinated Action facilitates and evaluates partnerships that differ in context and level, phase of the program and topics addressed.

Conclusion

The thesis has revealed that action research methods and tools are valuable because they fit community health promotion, they generate actionable knowledge for relevant stakeholders, and they are essential and complementary in capturing and assessing the full effects of a community health promotion intervention. Scientific quality is assured by the use of different verification techniques and scientific criteria. Participation is of cardinal value as it contributes to health and serves multiple purposes in health promotion programs. Systematic learning processes can make participation manageable, and research activities are a proper way to facilitate those learning processes. Nonetheless, the potential of participation has not yet been harnessed. Participation thrives in principle-based programs: programs that are characterized by the co-generation of knowledge by involved stakeholders in a flexible and tailored way. To further develop and harvest the full benefit of participation and principle-based programs, researchers are challenged to broaden their research paradigm, practitioners are challenged to foster and coordinate principle-based programs, participation and learning processes and policymakers are challenged to stimulate and support science and practice. By participating and collaborating supportive social environments for health can be created.



Contents

1

General introduction

1.1 Introduction

In today's health promotion, practitioners, scientists and policy makers are challenged to apply key strategies in health promotion: intersectoral collaboration and community participation. However, there is a lack of knowledge about how to evaluate these strategies and how to assess the effectiveness. In particular, there is a lack of feasible methods and tools to facilitate and evaluate intersectoral collaboration and community participation. As a result, practitioners, scientists and policy makers feel uncertain about implementing and evaluating community health promotion. This study aims to contribute to the further development of methods and tools to facilitate and evaluate community health promotion and to contribute to the development of theory in relation to health promotion.

In this chapter, first current challenges in health and health promotion are described. The principles of health promotion, the salutogenic theory and the assets approach are explained. In section 1.3, the key strategies of health promotion are described. Section 1.4 describes the current practice of community health promotion in the Netherlands and the health promotion framework. In section 1.5, constraints and challenges in evaluating community health promotion are detailed. This leads to the formulation of the overall aim of the thesis in section 1.6. Also, four different case studies, for which data have been gathered, are described, and five research questions are formulated to address the objective of this study. Finally, an outline of this thesis is provided in section 1.7.

1.2 Health and health promotion

The health of a population has been a matter of concern for many centuries and in every country of the world. Health is not equally distributed throughout the world, throughout countries and throughout municipalities. Working towards better population health is a major challenge at all levels: international, national, regional and local. Over the years, the conceptualization of health has changed considerably. Traditionally, health was considered as an abstract state and defined in the narrow terms of 'absence of disease', based on a deficit model. Nowadays, it is looked at from a holistic point of view, as indicated by the definition provided by WHO (1986): 'health is a state of complete physical, social and mental well-being, which enables people to lead an individually, socially and economic productive life'. Also, health promotion is based on the vision that health is not only influenced by person-related characteristics (genetic and biological). Lifestyle, the social and physical environment, and health care (including preventive action) are determinants of health as well, as first proposed by Lalonde (1974) in the report *A New Perspective on the Health of Canadians*. This report was the precursor of today's view on health, also called 'new health promotion'.

An important reason why new health promotion has become popular is the insight that health education, e.g. making people aware of the negative consequences for health of their behavior, in itself is not enough to lead to the expected behavioral effects. Because of the recognition that the social and physical environment should

be considered as well, community programs to promote health have been launched all over the world, including in the Netherlands.

Conceptual health model

On the basis of Lalonde's vision on health, the National Institute of Public Health and the Environment (RIVM, 2007) developed a conceptual model of the determinants of health (see Figure 1.1). The model shows health being interpreted as the outcome of a multi-causal process with various factors influencing each other. The factors are categorized into three groups influencing health status: 1) external developments, 2) determinants of health and 3) prevention and care. These groups of determinants all interact with each other and together they influence the health status of individuals and populations.

1. The factors relating to external developments, demography, economy, socio-cultural developments, technology and special factors, are treated as autonomous developments originating outside the public health domain.
2. The factors that influence health are generally referred to as determinants of health. Determinants can be categorized into three groups: endogenous determinants, exogenous determinants and the prevalent system of health care (Koelen and Van den Ban, 2004; RIVM 2007; Ruwaard et al., 1994). The multiple determinants addressed are both within individuals' control and outside it.

   Endogenous determinants, or person-related factors, are those that affect health from inside. They refer to biological factors which may be hereditary or acquired during the course of the individuals' life. In some cases, as with color-blindness, the hereditary nature is obvious. Health-influencing person-related factors often develop as a result of interaction involving genetic, lifestyle and environmental factors, and are therefore partially genetic and partially acquired. This is the case with, for example, physical condition, increased blood pressure, bodyweight, glucose intolerance or reduced lung function as a result of an earlier infection.

   Exogenous determinants refer to external influences on health and relate to the physical environment, the social environment and lifestyle factors. The physical environment includes not only familiar physical, chemical and biological agents (noise, radiation, atmospheric pollutants, food additives, contaminated food and allergens), but also the characteristics of housing and the local spatial environment (architectural aesthetics, the availability of facilities or access to green space). The social environment includes socio-economic status, ethnic background, social relations and networks, including the presence of social support, working environment, the scope for personal development, housing conditions, the opportunity to relax by going on holiday or through recreation, social interaction and the mores of a neighborhood.

   Lifestyle factors refer to identifiable patterns of behavior that are maintained with some consistency over time. They include behavior that is consciously

directed to health, but also behavior and practices for non-health purposes that have health consequences or risks. Examples of lifestyle determinants are smoking, diet, alcohol consumption and physical activity.

3. Health is directly or indirectly influenced by the system of preventive measures and care that exists within society. This refers to health services in

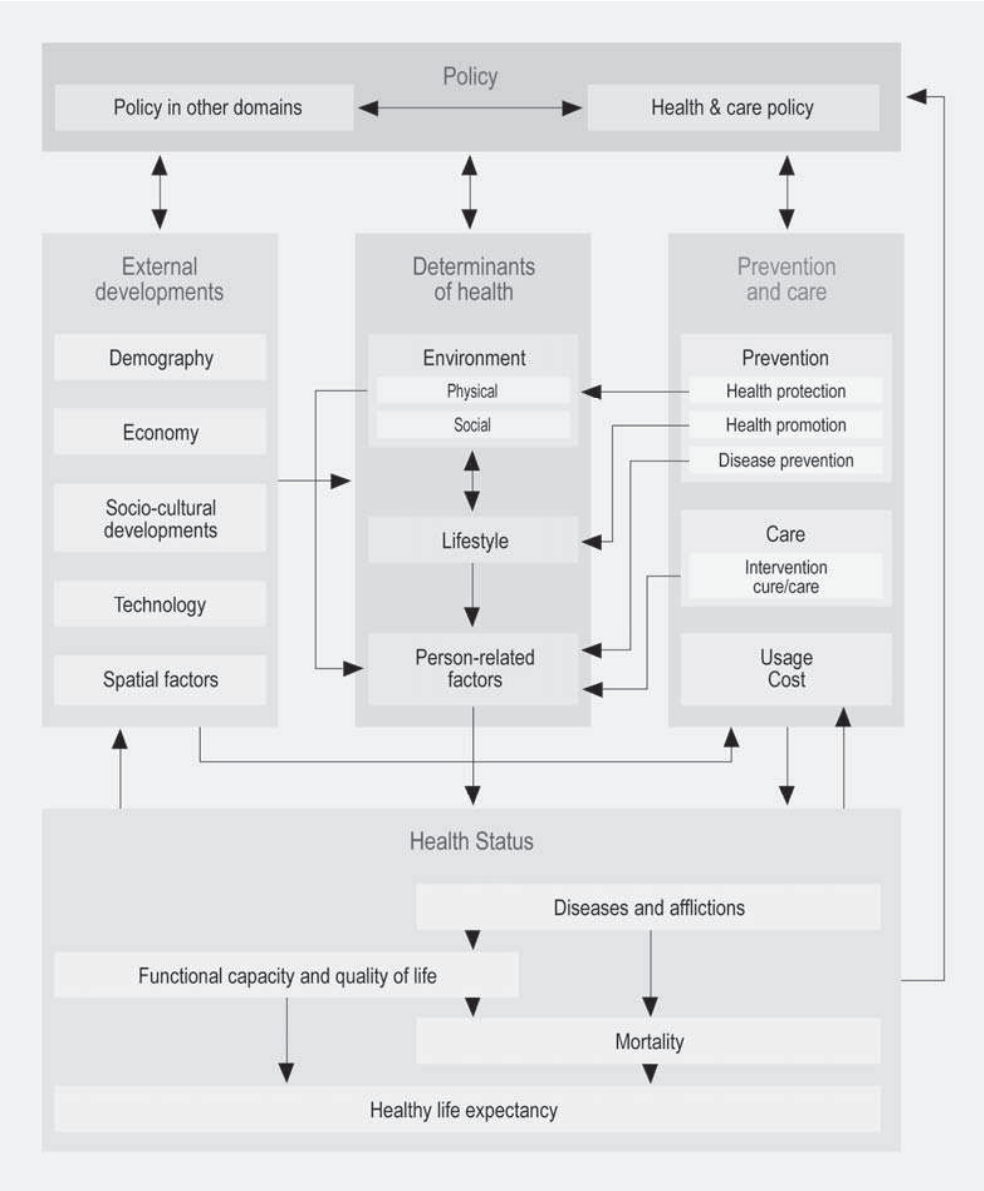


Figure 1.1 Determinants of health status, detailed conceptual model (RIVM, 2007).

relation to care, cure and prevention. It includes diagnostic and treatment services, medical and nursing services, and health services in the arena of disease prevention and health promotion. Three forms of preventive actions are distinguished: health protection, health promotion and disease prevention.
Health protection involves regulating exposure to hazardous substances at work, in food, in consumer products and in the environment. Health promotion involves acting to encourage healthy behavior and a healthy environment. Disease prevention is action to prevent the occurrence of specific illnesses (e.g. by vaccination) or to screen for (predisposition towards) an existing illness.

Definition and principles of health promotion

The vision on health as illustrated by Figure 1.1 is also visible in the definition of health promotion as laid down by the Ottawa Charter on Health Promotion (WHO,1986, p. 1): 'the process of enabling individuals and communities to increase control over, and to improve their health'. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment. Health is therefore a resource for everyday life, not the objective of living. Health is thus a positive concept emphasizing social and personal resources, as well as physical capacities. The definition of health promotion contains three important components (Koelen and Lindström, 2005). Firstly, it recognizes the determinants of health: biological factors (endogenous determinants), the physical and social environment and lifestyle (exogenous determinants) and the system of health care. Secondly, it sets an objective, that is, to lead an active, productive life. Thirdly, it refers to the activity – the enabling process – whereby the determinants of health are used to reach the objective in a dialectic relationship between people and the setting. At the heart of the process is respect for people as active, participating subjects. Since health promotion is defined and seen in this way, WHO calls for health promotion actions (see Box 1.1).

'Health promotion brings together actions directed at strengthening the skills and capabilities of individuals and actions directed towards changing social, environmental and economic conditions that may have an impact on public and individual health' (Koelen and Van den Ban, 2004, p. 37). A healthy environment is an essential precondition for the individual to be able to show healthy behavior.

The salutogenic theory and the assets approach

The development of new strategies in health promotion has gone hand in hand with theoretical developments. The salutogenetic theory offers a compatible perspective for health promotion (Antonovsky, 1996) as also other approaches with salutogenic elements (Lindström and Eriksson, 2006), such as the assets approach. Historically, approaches to the promotion of population health have been based on a pathogenic paradigm (Tones and Green, 2004). In the pathogenic paradigm, there is a predominance

Box 1.1 Strategies for health promotion in a globalised world

Progress towards a healthier world requires strong political action, broad participation and sustained advocacy. Required actions in health promotion: all sectors and settings must act to:

- Advocate for health based on human rights and solidarity;
- Invest in sustainable policies, actions and infrastructure;
- Build capacity for policy development, leadership, health promotion practice, knowledge transfer and research, and health literacy;
- Regulate and legislate to ensure a high level of protection from harm and enable equal opportunity for health and well-being for all people;
- Partner and build alliances with public, private, nongovernmental and international organizations and civil society to create sustainable actions.

Source: WHO, 2005, p.3.

of deficit models, which focus on searching for causes of diseases, analyzing risk factors of individuals and identifying problems and needs of individuals and populations. Much of the evidence available today is based on a deficit model (Morgan and Ziglio, 2007). This is more or less opposite to the salutogenesis and assets approaches, which view health from a positive point of view.

The concept of salutogenesis was introduced by Antonovsky (1979, 1987). The salutogenic approach focuses on the factors which keep individuals from moving towards the disease end of the health and illness spectrum (Lindström and Eriksson, 2006). The salutogenic perspective looks for the origin of health by searching for 'what keeps people healthy' by focusing on people's resources and capacity to create health. Salutogenesis examines how resources in human life support development towards positive health. Positive health includes objective fitness, subjective well-being, optimal functioning, meaningful life and positive quality of life. Salutogenesis can help to identify the 'health assets' that lead to higher levels of overall health, well-being and achievement. The more individuals understand or comprehend the world in which they live, manage their own lives and are able to give meaning to their lives, the more they can utilise the resources they have themselves and around them to maintain their own health. Eriksson and Lindström (2008) have demonstrated how the salutogenic framework supports the philosophical and practical intentions of the Ottawa Charter of Health Promotion (WHO, 1986). The assets approach also reflects the values and principles of health promotion by calling on the resources and capacities present in individuals and communities to take action in favor of more health. In particular, the need to strengthen local communities and promote the process of community empowerment is emphasized, as well as encouraging ownership and control of communities' own endeavors and destinies and the development of personal skills. An assets approach to health and development embraces a salutogenic notion of health creation and in doing so encourages the participation of local communities in the health development process (Morgan and Ziglio, 2007).

1.3 Key strategies in health promotion

As mentioned in section 1.1, intersectoral collaboration and community participation are key strategies in health promotion. In practice, intersectoral collaboration and community participation are exerted by both professionals and community members, and they overlap to a great extent, but for the sake of clarity both concepts are explained apart.

Intersectoral collaboration

Intersectoral collaboration is defined as 'a recognized relationship between (parts of) different sectors of society, which has been formed to take action to an issue to achieve health outcomes in a way which is more effective, efficient or sustainable than might be achieved by the health sector working alone' (Nutbeam, 1998a, p. 360). Participants collaborate on behalf not only of the organization that they represent, but also of the collaboration as a whole. There are several ways in which collaboration, coalitions or partnerships are important (see Box 1.2).

There are several types of collaborations (Butterfoss, 1993). In communtiy health promotion, the most common type is a collaboration of professionals and community representatives who come together to influence more long-term health and welfare practices in their communities. These collaborations are usually initiated by one or more organsations in response to a funding proposal. Collaborations can also be categorised according to the differences in functions that they fulfil for their members, including: information and resource sharing, technical assistance, self-regulation, planning and coordination services, and advocacy. Most health promotion collaborations perform

Box 1.2 Intersectoral collaboration

Intersectoral collaboration:

- enables organizations to become involved in new and broader issues without having the sole responsibility for managing or developing those issues;
- demonstrates and develops widespread public support for issues, actions or unmet needs;
- maximises the power of individuals and groups through joint action; they can increase the critical mass behind a community effort by helping individuals achieve objectives beyond the scope of any one individual or organization;
- minimises duplication of effort and services. This economy of scale can be a positive side effect of improved trust and communication among groups that would normally compete with one another;
- helps to mobilise more talents, resources and approaches to influence an issue than any single organization could achieve alone;
- provides an avenue for recruiting participants from diverse constituencies, such as political, business, social and religious groups, as well as less organized grass-root groups.

Source: Butterfoss et al., 1993.

functions within more than one of those categories. Another type of collaboration is issue specific and ad hoc in nature: the action set collaboration. In order to accomplish a specific purpose, the issue brings together organizations that may not previously have been in the same network. Health promotion collaborations often follow the action set model, i.e. agencies, interest groups and individuals come together in an alliance or partnerships to plan and implement strategies that promote health.

Community participation

Community participation refers to the involvement of individual community members in activities such as identification of community needs, setting priorities, identifying and obtaining means to meet those priorities, including the development, implementation and evaluation of those means in terms of their outcomes (Koelen and Van den Ban, 2004). Community participation, just like intersectoral collaboration, is considered to be a process that develops over time.

People can be encouraged to participate in community or civil activities if they feel that their contributions will be valued and that there is a balance between what they give and what they get from their involvement.

In terms of benefits, it has been shown that participation in voluntary organizations is positively correlated with happiness, which in turn is related to health quality of life (Veenhoven, 2004). For example, in the Netherlands, at present neighborhood administration projects are supported by local authorities. As a citizen it is possible to mobilize money for a residents' association with the aim of neighbors together maintaining their local green civic space and playgrounds by cleaning them up, weeding, raking, sweeping and also painting. In return, the local authority gives the association some money, to be invested in new equipment, for example paint or a litter bin. Such initiatives save the community money. It is also assumed that people who participate enjoy greater well-being and more health; but participation and organizing activities also demands a lot from community members. Community members volunteering to organize the activities have to know the administrative procedures and ways to get things done, such as filling up forms and sending them to the right organizations, opening a bank account to receive the money from the local authority, negotiating with the local government officials, mobilizing and inviting other community members to participate, organizing the meetings, providing equipment and coffee, and taking care that public health and safety rules are met (e.g. participants must wear a high visibility (high viz) jacket when working in the civic spaces).

The way in which community members participate differs depending on the situation. Three different forms of participation can be distinguished (Gilchrist, 2003):

1. Community members organize collectively to deliver services through some kind of voluntary organization.
2. Community members contribute as lay people working together with professionals, for example in a project group.
3. Community members take part in communal activities, such as joining a walking tour.

The challenge for professional organizations is to facilitate community members in a way that encourages them to participate in organizing or taking part in activities. Although the focus in this section has been on participation with regard to taking part in activities and the organization of activities, participation can also be a way to influence policy – an objective that may also be a goal of community health promotion. The next section deals with the broader context of community health promotion in the Netherlands.

1.4 Community health promotion in the Netherlands

In the Netherlands, as in many other countries, the principles of health promotion are widely recognized and applied (e.g. WHO, 2005; Rootman, 2001). Dutch health policy recognizes the neighborhood as a setting in which to promote health (Ministerie van VWS, 2003), and legislation requires municipalities to develop and implement local health policies (Ministerie van VWS, 2006). The community approach fits very well also with the introduction of the Social Support Act (Ministerie van VWS, 2007), which puts a strong emphasis on people's responsibility for their own health problems and on the participation of all citizens in all facets of society. Policy and legislation are supposed to aim at the promotion of health across sectors and with a strong community involvement. Local municipal health services are charged with implementing community programs because they are responsible for the protection, control and promotion of health in their area.

Many efforts have been made to evaluate the effectiveness of community programs. Harting and Van Assema (2007) evaluated 22 community health programs in the Netherlands. Their conclusion is that community programs are promising but that realized outcomes do not meet the original expectations of the programs. The Netherlands Organization for Health Research and Development (ZonMW) funds nine academic collaborative centers as part of a national science-practice interaction program. One of the academic collaborative centers is AGORA, in which Wageningen University and the Municipal Health Service Gelre-Ijssel are main stakeholders. AGORA collates knowledge from practice, science and policy in order to bridge the gap between these different sectors. The aim of AGORA is to contribute to more effective, evidence-based and problem-oriented approaches to health promotion by working in an interdisciplinary mode.

Health promotion framework

A recent development that offers opportunities for the development of new approaches to health promotion is the health promotion framework. The health promotion framework (Figure 1.2) was developed by Saan and De Haes (2005) to contribute to the professionalisation of health promotion and to clarify the debate on evidence and funding criteria. The framework summarizes the common understanding of the health promotion principles, using the Ottawa Charter (WHO, 1986) as a starting point.

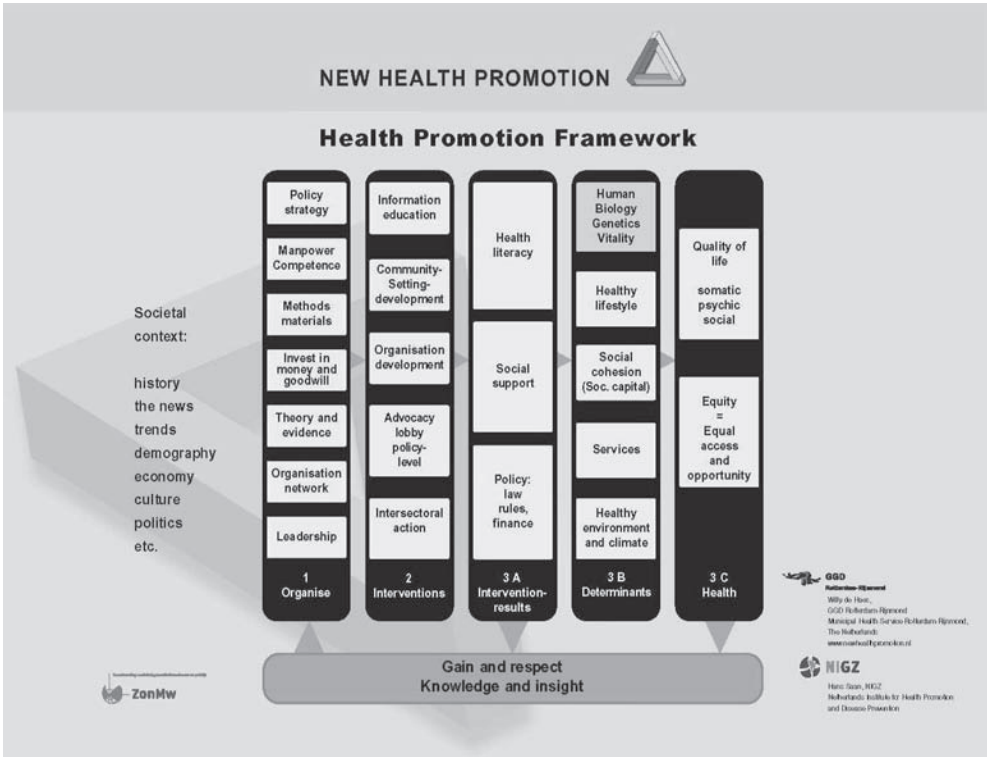


Figure 1.2 Health Promotion Framework (Saan and De Haes, 2005).

In the framework, health promotion is placed in the societal context (left side). To gain the health outcomes, quality of life and equity, a number of steps or factors have to be worked through and achieved, at least to a certain degree. Factors such as social capital and social support are simultaneously intermediate outcomes and a prerequisite for achieving the ultimate health outcomes.

The added value of this frame is that it shows the complexity of health promotion and the interconnectedness of the factors, and emphasizes the need to address multiple factors at multiple levels because environmental and lifestyle factors simultaneously influence health. To facilitate, monitor and evaluate the factors, more in-depth studies have been carried out (Van de Goor et al., 2007; Leibbrand et al., 2007; Saan et al., 2007a; Schmidt et al., 2007a; Van der Smissen et al., 2007; Wagemakers et al., 2007b). The frame is used as an audit tool to facilitate and evaluate community programs to promote health (Saan et al., 2007b). The frame is promising as an audit tool because it delivers data not provided by commonly used evaluation methods.

1.5 Constraints and challenges in the evaluation of community health promotion

Although community health promotion is prominent and promising, it is generally assumed not yet to be evidence-based (Harting and Van Assema 2007; Roussos and Fawcett, 2000). The reason is that it is difficult to control, set up, maintain, monitor and evaluate community health programs. The processes in such programs are complex (Zakocs and Edwards, 2006), and the principles of health promotion as formulated by the WHO (1986, 2005) are often not implemented as originally intended (Harting and Van Assema, 2007).

McQueen and Jones (2007) write in the introduction of their book, *Global Perspectives on Health Promotion Effectiveness*, that the definition of health promotion calls for what should be done but that it is not stated how it should be done and how to evaluate what has to be done. In other words, they signal a knowledge gap about how to evaluate health promotion programs. This probably explains why community health promotion is not yet considered evidence-based.

Constraints

Evaluation attempts up to now illustrate why it is so difficult to find evidence for the effectiveness of health promotion, especially when the dominant scientific way of research is practiced:

1. Tightly designed studies like the randomised controlled trial (RCT) are not suited to community programs. Dutch experiences (Abbema et al., 2004; De Haes et al., 2002; Kloek, 2004; Koelen, 2000; Schmidt et al., 2007b; Vaandrager, 1995; Voorham et al., 2002; Wagemakers et al., 2007a) and experiences in several other countries (Berkeley and Springett, 2006; Butterfoss, 2006; Camprostrini, 2007; Glasgow and Emmons, 2007; Rifkin et al., 2000; Roussos and Fawcett, 2000; Thorogood and Coombes, 2004; Tones and Green, 2004) teach us that the implementation of an RCT is difficult because problems with 'control'due to interference with the socio-cultural and political context, the diversity and multiplicity of intervention outcomes, the absense of an appropriate comparison group and random assignment. Besides this, in controlled studies, issues crucial to local concerns are not always addressed, the research design is not always relevant or representative, and the research often fails to evaluate cost, reach, setting, adoption, maintenance and sustainablity. Moreover, RCTs require the prior specification of the interventions and the target group; but this is diametrically opposed to the principles of health promotion (Allison and Rootman, 1996; Alting et al., 2003a, 2003b; Koelen et al., 2001; Rootman et al., 2001; WHO, 1986, 2005).
2. In many evaluation studies, the focus is solely on community-wide behavior change and on population-level health outcomes (Granner and Sharpe, 2004; Roussos and Fawcett, 2000; Zakocs and Edwards, 2006), whereas changes

in determinants in the physical and social environment are overlooked and underexposed. In many studies, only few changes are reported, due, for example, to the fact that activities are targeted at only part of the community population, that the evaluation period is too short (usually less than four years), and that systematic measurement of individual exposure to each of the multicomponent and multilevel interventions is usually not attempted (Roussos and Fawcett, 2000).

3. Indicators, tools and methods often are not geared to measure community and systems change and the processes leading to those changes. Zakocs and Edwards (2006) argue that what continues to be missing is a list of evidence-based coalition-building factors that have been empirically linked to indicators of coalition effectiveness. Granner and Sharpe (2004) conclude that little research has been conducted to evaluate measurement tools for assessing the effectiveness of coalitions and partnerships for promoting community health. In their review of 34 studies of collaborative partnerships, Roussos and Fawcett (2000) found it difficult to compare the rate of community and systems change over time, both within and across studies, because common measurement instruments are rarely used. There are at present no validated tools for measuring the attainment of intervention goals or process goals (RIVM, 2007).

The challenge is to use other approaches and to develop methods and tools that address the reality of health promotion and contribute to its evaluation and evolvement.

Challenges

Process evaluation and action research are promising alternative approaches by which to evaluate community health promotion (Butterfoss, 2006; Goodstadt et al., 2001; Koelen et al., 2001; McLean et al., 2005; Minkler and Wallerstein, 2003; Nutbeam, 1998b; Nutbeam and Bauman, 2006; Roussos and Fawcett, 2000; Rice and Franceschini, 2007; Schulz et al., 2003). These approaches are characterised by ongoing evaluation at multiple times and using multiple methods and types of evaluation. Health promotion is a process in which interventions are gradually developed, and it is desirable to have intersectoral collaboration and community participation in various stages of a program. Process evaluation is used to get insight into the processes leading to community and systems change. Process data can provide valuable information on the impact of implementation strategies at different stages and levels in a program, and can be helpful in adapting methods and tools to the specific circumstances.

Action research is considered to be the most appropriate methodology in community health promotion because it reflects the principles of community health promotion, recognizes the complexity of community health promotion and facilitates the development of capacities, learning and empowerment (Rice and Franceschini, 2007). Action research has an action function in addition to an evaluation function. The action function supports and stimulates the progress of the intervention. Results

are immediately fed back into the program. This helps the people working in that program to decide how to continue, thus literally stimulating and guiding action (Koelen and Van den Ban, 2004). Participatory methods, in which all stakeholders are involved in the intervention and ideally also in the research process, can be part of action research. Participatory methods contribute to achieving and sustaining intersectoral collaboration and community participation.

In Table 1.1, three research approaches: the randomised controlled trial, process evaluation and action research are listed according to their characteristics, strenghts and weaknesses. Action research is explained in more depth in the methodology chapter of this thesis.

To summarize this section, practitioners, researchers and policy makers are uncertain about how to implement and evaluate health promotion programs. This

Table 1.1 Research approaches: characteristics, strengths and weaknesses in community programs

Research approach	Characterised by	Potential strength	Frequent weakness
Randomised controlled trial (RCT)	Abstracting data from subjects Population-oriented Progressive Linear	Objective 'Hard' evidence Internal validity Use of well established indicators of health and determinants Objectivity by (apparent) independence of researcher	Expensive Inflexible Not fitting to the context Does not answer how and why programs work
Process evaluation	Mix of quantitative and qualitative data Multiple methods Multiple times Continuous	Quality information which makes improvement possible Helps to understand how and why programs work Focus on intermediate and process outcomes	Subjective, and, in some cases, reliability issues Choice of indicators still matter of debate
Action research	Participatory approaches Mutual learning objectives Dialectical processes (change and feedback) Case-oriented Cyclical Iterative Multiple methods Multiple times Continuous	Addressing partnership and community Flexible Different methods and tools Triangulation Reflects principles of health promotion Relevant and specific to context Focus on cogenerated and actionable knowledge	Subjective Results attributable to the program only

uncertainty is due to the fact that the definition of health promotion calls for what should be done but does not state how to evaluate, or how to decide on the effectiveness of, what has been done in its name (McQueen and Jones, 2007). Although many community programs have been launched in the Netherlands and elsewhere, there is a dearth of knowledge about how to systematically implement and evaluate such programs in which processes are flexible.

The practice of health promotion highlights the need for a more flexible and participatory approach – one that reflects health promotion principles. The social environment and the physical environment, both exogenous determinants of health, have been, up to now, underexposed in health promotion.

1.6 Overall aim, case studies and research questions

This study aims to contribute to the practice, science and policy of health promotion on the community level. The main focus of the thesis is on the social environment because to bring about changes in the physical environment, in general, changing the social environment is a precondition. The main objective of the study presented in this thesis is:

To gain the knowledge required to contribute to the development of methods and tools that facilitate and evaluate community health promotion, and to contribute to the development of theory in relation to health promotion.

The methods center around a number of case studies. The case study is a research strategy which investigates the central concepts within its real-life context, thereby relying on multiple sources of evidence and making use of both qualitative and quantitative data. To address this objective, different case studies and settings were selected, important to the selection of the cases studies was that action research guided the case or that action research could be applied as part of the program and research activities. The case studies are convenient samples stemming from the authors' appointment as a researcher (in the *Working on Healthy Neighborhoods* program in Eindhoven and in the pilot project *Health Promotion Framework*), from supervision by the author (in the community program *Healthy lifestyles* in Amsterdam and the pilot program *Overweight in the Neighborhood*) (See Box 1.3).

Research questions

To answer the main objective of this study, five research questions have been formulated:

1. What was the value of the methods and tools used in the Eindhoven case to facilitate and evaluate *intersectoral collaboration* as part of the social environment in community health promotion?

Box 1.3 Case studies and settings in which data have been gathered

Community program Working on Healthy Neighborhoods Eindhoven
The Municipal Health Service in Eindhoven started the community program to improve health-related behavior in two deprived neighborhoods. The overall aim of the program was to reduce socio-economic inequalities in health. Between 2000 and 2003, Wageningen University conducted participatory action research (see Chapter 3).

Community program Healthy Lifestyles Amsterdam
The Municipal Health Service Amsterdam started a community program with and for Turkish and Moroccan women. The aim of the program was to gain insight into the factors contributing to the high prevalence of overweight among Turkish and Moroccan women in the 25 to 45 years age group in Amsterdam and into the possibilities to develop programs in collaboration with the target group. Participatory action research was carried out by the municipal health service, supervised by Wageningen University from 2004-2006 (see Chapter 4).

Pilot project Health Promotion Framework
The aim of this pilot project was to further develop and test the framework (see Figure 1.2), a standard for organizing effective health promotion, developed by Saan and De Haes (2005). Wageningen University, in collaboration with the municipal health services of Eindhoven, Amsterdam and Gelre-IJssel defined and conceptualized the factor social support and developed tools to measure social support. The results of the work carried out for the pilot project form the basis for Chapter 6.

Pilot program Overweight in the Neighborhood
The pilot project, Overweight in the Neighborhood addresses the social and physical environment of health with the aim of reducing overweight and obesity. The Netherlands Institute for Sport and Physical Activity (NISB) started the project in 2007. In the project, methods and tools were developed (see Chapter 7).

2. What was the value of the methods and tools used in the Amsterdam case to facilitate and evaluate *community participation* as part of the social environment in community health promotion?
3. What are the challenges for coordinated action on health promotion and what *factors* are important *in achieving and sustaining coordinated action for health*?
4. What concepts belong to the *social environment of health* and how can the concepts be defined and conceptualized into variables to be used in action research?
5. What tools can be (further) developed based on variables that facilitate and evaluate *changes in the social environment* in community health promotion?

Different research methodologies and tools have been used to answer the research questions. For a comprehensive overview of these methodologies see the next chapter.

1.7 Outline of the thesis

In Chapter 2, the research approach, methodologies and scientific criteria that underpin this thesis are discussed. Chapters 3 and 4 consist of empirical data and deal with the first two research questions. Chapter 3 describes the community program *Working on Healthy Neighborhoods* in Eindhoven and Chapter 4 the *Healthy Lifestyle* program in Amsterdam. Both programs are case studies in community health promotion in which action research was conducted to gain a deeper understanding of intersectoral collaboration and community participation.

In Chapters 5 and 6, insights from the case studies and theoretical concepts are linked to gain a better understanding of how to bring about change in the social environment of health.

Chapter 5 addresses the third research question by putting together the lessons learnt from the two case studies and from other similar case studies in the Netherlands.

Chapter 6 deals with the fourth research question by synthesizing what is known about the social environment of health, based on literature research and experiences with case studies. A framework with qualitative and quantitative variables is composed.

Chapter 7 builds on the previous chapters by presenting the tools to be used in an action research approach. The development and piloting of the coordinated action checklist and guidelines in six different partnerships in community health promotion are described, analyzed and evaluated.

Chapter 8, the final chapter, addresses the main objective of the study. A conclusive overview of the findings is presented. Subsequently the generated knowledge on approach, methods and tools and the contribution to the theory of health promotion is described. The chapter ends with future directions in community health promotion for science, practice, and policy.

2

Methodological approach

2.1 Introduction

This thesis contributes to the field of health promotion by studying methods and tools to be used in community health promotion programs that induce change in the social environment. The main objective of the study is to gain the knowledge required to contribute to the development of methods, tools and theories in community health promotion. The focus is on bringing about changes in the social environment through the key strategies in health promotion: intersectoral collaboration and community participation. The empirical data on intersectoral collaboration and community participation presented in this thesis stem from case studies in which action research is the leading research approach. As in other social science research, in this study also, the research practice proved to be less straightforward than the textbooks suppose it to be, i.e. as being a process going from research questions to operationalization of variables and designing the research format. Nevertheless, the data have been analyzed systematically and criteria that guarantee scientific quality have been adhered to. In order to do justice to the exploratory, evolving nature of the inquiry process that underlies this study, the why and how of the research approach, in this chapter the methods and tools used are explained in detail.

This chapter is organized as follows. First, in section 2.2, action research is defined and explained. Special attention is devoted to social change processes (2.3), to the (participatory) inquiry process (2.4) and to the role of the action researcher (2.5). In section 2.6, the scientific merits of action research are addressed. Section 2.7 entails a reflection upon doing a thesis on action research. In section 2.8, the research criteria germane to action research are explained, and in section 2.9 the learning process followed in this study is made explicit using the idea of single-loop and double-loop learning. The last section (2.10) describes the methods and tools used in the different chapters of this thesis.

2.2 Action research

According to *The Sage Handbook of Action Research*, action research can be defined as: *a participatory process concerned with developing practical knowing in the pursuit of worthwhile human purposes. It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities* (Reason and Bradbury, 2008, p. 4).

Action research is a systematic inquiry for the purpose of taking action or effecting social change, specifically used in this thesis to understand the social environment of health, and changes therein. It is a pioneering approach toward social research that combines the generation of theory with changing the social system through the researcher acting on or in the social system (Susman and Evered, 1978).

Action research has both an action function and an evaluation function. The action function is supposed to support action and to stimulate the progress of the intervention. The assumption is that feeding results immediately back into the program

helps the people working in practice to decide how to continue, thus literally stimulating and guiding action (Koelen and Van den Ban, 2004). The evaluation function seeks to monitor and ascertain processes and outcomes of interventions or actions. Evaluation serves to legitimize a program and make it accountable.

Kurt Lewin (1946) is generally credited as the person who coined the term action research, which serves as an umbrella term for other terms such as participatory action research, participatory research (List, 2006) and also collaborative inquiry, emancipatory research and action learning; but action research is the term most generally used in all disciplines and fields (Whyte et al., 1991). Action research leaves the positionality (insider or outsider) of the researcher open. When the researcher acts in the social system, the term participatory action research is usually employed. In fact, participatory action research can be viewed as a special form of action research. In participatory research, the researcher collaborates with all the others involved, including members of the target group: the researcher is a participant in the intervention. Heron and Reason (1997) call this cooperative inquiry, which means research with, rather than on, people: stakeholders are involved as co-researchers in all dimensions of the research process.

Action research promotes a multi-method approach to evaluation. Qualitative and quantitative methods can be integrated and used in an equal and parallel way and combined (Steckler et al., 1992). Qualitative methods are used to help develop quantitative measures and instruments, and to help explain quantitative findings. Action research is not by definition either qualitative or quantitative. In general however, by its very nature, action research cannot be only quantitative because it is essential to study in detail and in depth the situation of the stakeholders (Zuber-Skerrit and Fletcher, 2007). The use of participatory methodologies is obvious but not a prerequisite. For example, research data can be obtained by methods such as surveys and standardized instruments, if results are fed back to the stakeholders. Figure 2.1 visualizes the relationship between participation, action and research (Hughes, 2008).

Action research seeks to solve a specific problem and, through feedback, disseminates the gathered information in order to bring about a desired change and to facilitate mutual learning processes. Consequently, action research can be classified as decision-oriented research, because it helps stakeholders to make decisions on the nature and content of their future activities (Leeuwis, 2004), and as utilization-focused evaluation because it is undertaken for and with intended stakeholders for specific intended uses (Patton, 2000). In dealing with the practical concerns of stakeholders, action research is oriented toward creating a more desirable future for them (Susman and Evered, 1978).

Action research in community health promotion focuses on issues that can be social, structural, physical and environmental, through active involvement of community members, organizational representatives and researchers in all aspects of the research process (Butterfoss, 2006; Israel et al., 1998; Minkler and Wallerstein, 2008). The claim is that action research improves the credibility of research, increases utilization of research findings (White et al., 2004), creates active support for the results of the process of inquiry and, therefore, greater commitment to change as well as the

Figure 2.1 Relationship between participation, action and research (Hughes, 2008).

greater likelihood that ideas will be diffused (Springett and Leavy, 1995).

In action research, research findings are to be used immediately, which has consequences for the time and scale of action research. Actions depend on the interpretation of the results by stakeholders and are (only) relevant and specific to the situation (Hemfrid et al., 2008)

The characteristics of action research have been delineated by Hart and Bond (1995), see Box 2.1.

In (participatory) action research, it is important to recognize that there is a difference between evaluating participation and participatory evaluation. The latter is the application of tools and techniques for participatory approaches by those for whom the programs were designed. The former is the assessment of whether the objectives set for participation have been achieved in the program (Rifkin et al., 2000). This thesis addresses both participatory evaluation (as part of action research) and evaluation of participation and collaboration.

Box 2.1 Characteristics of action research

Action research:

- is educative;
- deals with individuals as members of social groups;
- is problem-focused, context-specific and future-oriented;
- involves a change intervention (has a specific intervention to seek an identified change);
- aims at improvement and involvement;
- involves a cyclical process in which research, action and evaluation are interlinked;
- is founded on a research relationship in which those involved are participants in the research process.

Source: Hart and Bond, 1995.

2.3 Social change processes

Action research is a means to both change the social system and generate critical knowledge about it (Susman and Evered, 1978). Social change refers to increasing the ability of the involved community or organization members to control their own destinies more effectively. Action research centres on knowledge that is useful to people in everyday life, that increases the well-being of individuals and communities in the context of sustainable relationships with the rest of the world, that is emancipatory in intent, that centres on dynamic, ongoing inquiry processes (Reason and Bradbury, 2001, p. 2) and that seeks to improve the participants' situation (Greenwood and Levin, 2007).

Action research puts participation into practice, engaging those who might otherwise be subjects of research or recipients of interventions. Action research involves stakeholders and therefore is participation oriented. This participatory orientation or view refers to a sense of both engagement and ongoing transformation of the human situation from less liberated to more liberated states of what is called 'human flourishing' (Reason and Bradbury, 2001, p.1). The participatory view contains a strong ethical dimension: that people should be involved in decisions that influence them (List, 2006). Action research encourages stakeholders to take ownership of the problems and processes, thus motivating stakeholders and stimulating active participation (Heron and Reason, 1997). Thus, processes have to be built on participation by the involved problem owners in order to achieve democratic decision making. The essence of such a democratic process is the co-generation of knowledge (Greenwood and Levin, 2007). Consequently, participation is also political: asserting people's right and ability to have a say in decisions that affect them (Reason and Bradbury, 2008). Roger and Schoemaker (1971) show very well that the type of social change depends on who defines the problem (community or professionals) and who provides the solution (community of professionals).

In action research, knowledge and skills are brought to a group of people who collaboratively open up the possibilities for self-managed social change. Stakeholders bring practical knowledge and experience of the situations in which they are trying to solve problems. Thus, professional knowledge, local knowledge, process skills, research skills and democratic values are the basis for co-generated knowledge and change to bring about a better future.

When stakeholders participate in action research, their thinking may be broadened as this ideally stimulates learning processes. Such social learning processes may contribute to common understanding, mutual agreement and collective action (Muro and Jeffrey, 2008). According to Stuttaford and Coe (2007), it is useful to be explicit about such learning processes in order to maximize the potential of action research. Learning, and also empowerment, may be promoted by interactive methods: methods that involve stakeholders in the information collection exercise such as interviews, feedback and dialogue between different stakeholders.

2.4 The inquiry process

Action research can be viewed as a way of working in the field, utilizing multiple research techniques aimed at enhancing change and generating data for scientific knowledge production. The distinctive element of action research is that the research aims to change practice as well as study it. There are four basic steps in the action research cycle: plan, act, observe/collect, reflect/review (Kemmis and McTaggart, 1982; Zuber-Skerrit, 2001). The cycle is run through over and over again, thereby continually improving practice and decision making in practice. The action research cycle consists of activities or steps. In observation, the issue or problem is monitored and described. Useful data are recorded and kept. In reflection, observations are interpreted and shared, so that the issue or problem can be better understood. In planning, actions are proposed to address the issue or the problem. In action, the plan is implemented and the cycle starts again as outcomes are observed, recorded and shared. These steps are repeated in sequence as work progresses, creating an upward spiral of improving practice. Because participatory approaches are open and flexible processes, plans need also to have a certain degree of flexibility. Figure 2.2 visualizes the iterative and cumulative processes of action and critical reflection. The upward spiral stands for the continuous refinement of methods and data interpretation in the light of understanding gained from previous cycles that seek to bring about social change and at the same time learn something about it.

The principle of improvement through iteration is also used in Kolb's cycle of experiential learning (Kolb, 1984) and has strong similarities with the action research cycle. It may be that almost all applied learning occurs through such a cyclical process. The contribution of action research can be to reveal that process, enabling a focus on improvement through reflection (List, 2006). The link between action research and decision making can be made easily from here: decision making can be regarded as the final outcome of (longer lasting) learning processes, involving reflection and action (Leeuwis, 2004).

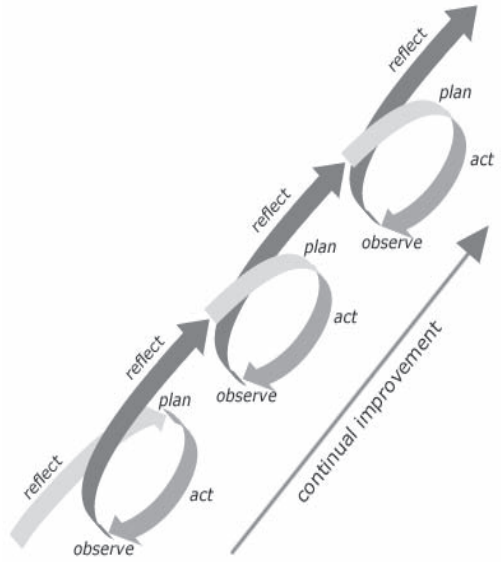


Figure 2.2 Action research cycle (after Zuber-Skerrit, 2001, p. 20).

The action research process encourages the development of the capacity of a system to facilitate, maintain and regulate the cyclical process of diagnosing, action planning, action taking, evaluating and specifying learning. The focus is on generating the necessary communication and problem-solving procedures (Susman and Evered, 1978).

2.5 Role of action researcher

Participatory approaches rely on, and therefore promote, interaction with stakeholders. The action researcher needs to be involved in the research, getting close enough to the stakeholders to understand what is going on, and the researcher must capture what is actually taking place and what stakeholders perceive is happening (Patton, 1990). This means that the (participatory) action researcher is constantly challenged by events and ideas, information and arguments posed by the stakeholders (Whyte et al., 1991).

Action research is collaborative. This means that there is interdependence between the action researcher and the stakeholders, especially in participatory action research. Therefore, the role relationship between the researcher and the other stakeholders has to be (re-)defined. In other research approaches, the role of the researcher or outside agent has been viewed as one of expert or professional, or as an external evaluator, one who judges merit or worth. For example in experimental research or survey research, the researcher takes away the information from the situation under study, and, after the research is complete, the results are presented, usually to policymakers and other researchers, but not to the 'subjects' researched.

However, this idea of a detached, neutral, independent, objective researcher is incompatible with the requirements of action research. In a (participatory) action approach, the researcher or professional facilitates, enables, or coaches and guides the other stakeholders (Laverack and Wallerstein, 2001). The success of facilitating and guiding hinges on understanding the values of the relevant actors since such values guide the selection of means and ends for solving problems and develops the commitment of the stakeholders to a particular solution. Empathy, taking the role of the other, may be the most effective means of making the theoretical or practical knowledge the researcher possesses really useful and accepted by stakeholders (Susman and Evered, 1978). To be effective requires the action researcher to be a skilled facilitator, convener and catalyst who can create an atmosphere of critical reflection and confidence building (Gibbon, 2002).

In the action research handbook (Reason and Bradbury, 2008), in the different chapters, the skills necessary for doing action research are indicated, although, due to their nature, skills are not easy to describe. Grant et al. (2008) reflect on challenges to be coped with as a participatory action researcher such as power issues, self-reflectivity, negotiation processes, building relationships, encouraging participation and making change. MacKewn (2008, p. 617) lists facilitation skills and qualities of action researchers. The list contains nearly 40 items such as modeling; affirming and confronting; listening, seeing and observing; follow group's agenda, lead group's agenda; offering choices, taking decisions; and so on. Many of these skills are contradictory and paradoxical, making the facilitator's job complex. Mead (2008, p. 641) highlights the capacities and qualities demanded of an action researcher. For example:

- Non-attachment to particular methods and ways of working because it is important to respond to the real and emergent needs of participants.
- Systemic perspective that brings different stakeholders together and builds networks of relationships to support and sustain the program.
- High level of personal energy to take a proactive stance, to manage the program actively for success.

In sum, the action researcher is challenged to fulfill a dual role as both implementer of the program and researcher (see also Gustavsen, 2003; Trondsen and Sandaunet, 2009) and is expected to reflect critically on his or her own role, to link theory and local understanding, to integrate lay knowledge and expert knowledge, to be scientific, counterintuitive and technically competent (Greenwood and Levin, 2007).

2.6 The scientific merits of action research

In the previous sections, the benefits of action research for practice and participants have been addressed. In this section, the ability of action research to generate critical knowledge about the social system and its changes, and to advance theory building, is described. First, the philosophical grounding on which action research finds its legitimate base is described. Second, theory development by action research is addressed.

Philosophical grounding of action research

Action research can base its legitimacy as science in philosophical traditions that are different from research designs that are based on a pathogenic paradigm such as the randomized controlled trial (RCT) (see also Chapter 1). Action research is based on a range of philosophical viewpoints. In the practice of action research, the philosophical viewpoints are integrated and interwoven (Wicks et al., 2008). Susman and Evered (1978) provide an overview of the philosophical viewpoints that legitimate action research. In Box 2.2 some of those viewpoints are described.

For science, the phenomenology viewpoint is especially interesting because the assumption is that knowledge can be created on the basis of personal and professional experience, and reflection on this experience (Zuber-Skerrit and Fletcher, 2007). Theory can be derived from and grounded in experiential data from multiple perspectives and through triangulation of methods. Observations are subjective and dependent on the observer's theoretical framework and value system. Results of the research are valid and reliable if they are recognizable and authentic to the people involved in the research. Thus, a different kind of knowledge is constituted: knowledge that is contingent on the particular situation. This has also consequences for theory development and research criteria.

Theory development

The contribution of action research to the development of theory in general is described by Susman and Evered (1978) and more specifically in the field of health research by Minkler and Baden (2008). The role of theory in the field of health promotion is described by McQueen and Kickbush (2007).

Box 2.2 Philosophical viewpoints that legitimate action research

- **Praxis.** The concept of praxis refers to the art of acting upon the conditions one faces in order to change them.
- **Hermeneutics.** Contemporary references to hermeneutics focus on its role in the interpretation of languages, culture and history. The most important contribution of hermeneutics to action research is the hermeneutical circle. In the social sciences, the hermeneutical circle takes the form of attempting an initial holistic understanding of the social system and then using this understanding as a basis for interpreting the parts of the system.
- **Existentialism.** Action research has in common with existentialism that both assert the importance of human choice and human values and both are keyed to the importance of human action. The possibility of choice is central to taking action, and the necessity to choose is central to human development.
- **Phenomenology.** Phenomenology, in its broadest sense, insists on the primacy of immediate subjective experiences as the basis for knowledge. The end of bringing about a more desirable future as well as the values and norms that guide the actions undertaken have no objective reality that can be empirically determined.

Source: Susman and Evered, 1978.

Action research facilitates the development of methodologies to gain know-how such as how to create settings for social learning, how to act in unprescribed and non-programmed situations, how to establish action guides where none exist, how to review, revise, redefine the systems of which we are part, how to formulate fruitful metaphors, constructs and images for articulating a more desirable future. Action research contributes to the development of theory by taking actions guided by theory and evaluating their consequences for the problems stakeholders face. Theory may then be supported or revised on the basis of evaluation. The theories and prescriptions for action are themselves the product of previously taken action and therefore are subject to re-examination and reformulation upon entering every new research situation. The objective, the problem and the method must be generated from the process itself, and the consequences of selected actions cannot be fully known in advance (Susman and Evered, 1978). In other words, theory develops from a synthesis of that which emerges from the data and that which emerges from the use in practice of the body of theory which informed the intervention and research content (Eden and Huxham, 1996).

Minkler and Baden (2008) report that community-based participatory research adds value to health research by 1) ensuring that the topic under investigation has meaning and importance for the community, 2) enhancing validity in the interpretation of results by reflecting, in part, community understanding and 3) enhancing the study's utility if the results are seen as practical and feasible and if they lead to education and action for change as part of the research process. Minkler and Baden also write that a more focused look at the impacts of community-based participatory research on academic researchers and on the research itself is needed: the role of academic researchers needs to be better articulated and more attention should be focused on the tensions between research designs such as the RCT and an action research approach.

Potvin and McQueen (2007) state that for many the Ottawa Charter provides the founding characterization of the field of health promotion, that not enough attention has been paid to theories of the social science and that many do not have a good grasp of what is distinctive about health promotion. Potvin (2007) especially addresses the cardinal value of participation in health promotion. The role of participation has rarely been critically examined and how participation can be fostered in practice has not been answered satisfactory.

This strengthens the need to address the second part of the main objective of this thesis – to contribute to the development of theory in relation to health promotion – and supports the need for a thesis on action research.

2.7 A thesis on action research

Action research has evolved over the last century. It is expected that the role of action research will be even greater in the future (Green and Thorogood, 2004); this certainly is supported by the rapidly growing literature on methods for community-based participatory research on health (e.g. De Koning and Martin, 1996; Israel et al., 2005; Minkler and Wallerstein, 2008) and the increase in the use of participative studies

and publications about such research (List, 2006). According to White et al. (2004), action research has not yet been implemented widely in the field of public health, whereas Hughes (2008) signals that it is increasingly used in various community and healthcare settings.

However, action research faces a number of interrelated challenges which concern (amongst others): 1) the balance between changing practice and contributing to theory and 2) the description, use and justification of this research approach and methods.

First, doing a thesis on action research means on the one hand contributing to the programs in which the action researcher participates and on the other hand reporting and accounting to the scientific peer community (and publishing in respected English-language journals). From a scientific point of view, reaching the point where something useful can be written up is a logical place to stop. The consequence is that, for practice, the research ends at an arbitrary point in time, because the practice will go on changing. The job of an action researcher also involves contributing to theory building or doing conceptual research. Conceptual research seeks, for example, to develop or test theories that have practical or even prescriptive implications for researchers or professionals (Leeuwis, 2004).

Second, because of the emergent approach of action research, its cyclical nature and the use of innovative and multiple methods, an action dissertation requires tailor-made decisions and clear descriptions about the selection and justification of (the combination of) methods and tools and about the way results support theory building. At the same time, the standards and quality of scientific research have to be considered.

2.8 Scientific criteria

Action research generates knowledge based on praxis, cyclical processes, situations, experiences and refection (see section 2.6), and therefore needs scientific criteria that fit its legitimate base. Lincoln and Guba (1985) have presented four criteria for evaluating quality and trustworthiness. The aim of trustworthiness in qualitative inquiry is to support the argument that the inquiry's findings are 'worth paying attention to' (Lincoln and Guba, 1985, p. 290). The four criteria are credibility, transferability, dependability and confirmability (see Box 2.3).

Lincoln and Guba's four criteria parallel the four that guide conventional inquiry: internal validity, external validity, reliability and objectivity.

Qualitative research criteria have continued to develop over the years and have moved toward a greater variety of validity considerations. For example, the significance of social relevance, participation and practical outcome as dimensions of quality have been clarified (Reason, 2006).

Koelen et al. (2001) present criteria to judge the confidence and applicability of research findings in the field of health promotion. Cohen and Crabtree (2008) reviewed and synthesized published criteria for good qualitative research and developed a cogent set of evaluative criteria appropriate and relevant for the particular qualitative approach. Because the field of qualitative research is broad and diverse, one universal

Box 2.3 Qualitative research criteria

- **Credibility** is concerned with checking whether the interpretations of the researcher match the meanings of those involved in the subject of inquiry. Methods to check for credibility are feedback sessions and discussion.
- **Transferability** is concerned with the external validity of the research. To ensure transferability, the time, place and context in which findings were found to be salient must be made transparent. Transferability is also referred to as 'fittingness'.
- **Dependability** is concerned with the stability of data over time. As an investigation proceeds, insights are gained and may change. These shifts in insights need to be both tracked and trackable for others. This means that the inquiry process and methods need to be documented.
- **Confirmability** assures that the integrity of findings is not so much the result of the method used as rooted in the information used. Accordingly, it needs to be made clear where information was found and how information has been interpreted into a structurally coherent whole.

Source: Lincoln and Guba, 1985.

set of criteria does not exist. Each study is unique and therefore different evaluative criteria are needed. Based on Koelen et al. (2001) and Cohen and Crabtree (2008), five different verification techniques are used in this thesis: triangulation, member or stakeholder checking, external auditing, peer review/debriefing and use of multiple cases (see Table 2.1).

The verification techniques differ in level as they can be used for verification of stakeholders' data (e.g. member checking), of program data (e.g. external auditing) and of data between programs (e.g. multiple cases).

Credibility

In the research process, credibility or internal validity is treated as a central issue: validity is tested in action by the degree to which the results satisfy the participants' goals and needs (Heron and Reason, 1997). To consider credibility, triangulation, member or stakeholder checking, external auditing, and peer review and debriefing were carried out. Triangulation means that the same finding has been crosschecked using different research methods (multiple methods) and using data from different sources about the topic (multiple sources). Both multiple methods and multiple sources were used within the case studies and throughout the whole dissertation.

Member or stakeholder checking also addresses credibility and was used within the case studies. Checking was achieved by feeding back and discussing the results of the interviews and the tools with stakeholders. The purpose of analysing results is to organize individual statements in order to produce new, higher-order insights. When participants agree on the interpretations of results, the threat of biased interpretation is considerably reduced. Interpretations with a high level of agreement can be considered reliable or credible. Five external audits were organized as part of the pilot project

Table 2.1 Verification techniques used in this thesis

Technique	Definition	Example in this thesis
Triangulation	Using multiple data sources in an investigation to produce understanding.	Data obtained by observation, by focus groups, by interviews and by document analysis.
Member or stakeholder checking	Data, analytical categories, interpretations and conclusions are tested with members of those groups from whom the data were originally obtained. This can be done both formally and informally, as opportunities for member checks may arise during the normal course of observation and conversation.	In Eindhoven, results of each evaluation round were discussed with stakeholders. In Amsterdam, results were discussed in focus groups. The results of the checklist for coordinated action were fed back and discussed in different partnerships.
External auditing	Auditing involves having a researcher not involved in the research process examine both the process and product of the research study. The purpose is to evaluate accuracy and whether findings, interpretations and conclusions are supported by the data.	The programs in Eindhoven and Amsterdam were both twice audited by the designers of the *Health Promotion Framework*.
Peer review/debriefing	The process of exposing oneself to a disinterested peer in a manner paralleling an analytical session and for the purpose of exploring aspects of the inquiry that might otherwise remain only implicit within the inquirer's mind.	The separate parts and the thesis as a whole were supervised by two co-promoters and a promoter and a private consultant in the field of health promotion. The published chapters were peer-reviewed. 15 Dutch experts in the field of health promotion reviewed parts of the scientific work undertaken.
Multiple cases	Check information with parallel investigations in different settings.	The results of the use of the checklist for coordinated action in different settings were compared and interpreted.

Source: Koelen, 2001; Cohen and Crabtree, 2008.

Health Promotion Framework (see 1.7). In peer review/debriefing sessions, research questions, methodology, ethics, accuracy of the interpretation of data and reporting were discussed. Based on those discussions, new actions were initiated.

Transferability

Transferability or fittingness holds the researcher responsible for ensuring that the setting and context in which data were collected are clearly described.

To address transferability, this thesis makes use of multiple case studies, that is, several investigations in different settings. Case study methods involve an in-depth, longitudinal examination of a single instance or event within a real-life context. If similar results are recorded in different cases, it is possible to draw conclusions about the usefulness of (new) research approaches, thus offering the possibility of developing strategies or principles that are useful in other communities (Koelen et al., 2001).

To contribute to the transferability of the research, several reports and data analysis documents were written. For the Eindhoven case, four reports (Wagemakers, 2000; Wagemakers and Koelen, 2001; Weijters and Koelen, 2002, 2003) and two external audits (Wagemakers, 2006a, 2007a) and, for the Amsterdam case, three reports (Van 'Riet and De Boer, 2006; Van 't Riet et al., 2005; Van 't Riet et al., 2006) and two external audits (Wagemakers, 2006b, 2007b) are available. Of all seven partnerships that used the checklist for coordinated action, the original data and notes of meetings are on file and available upon request. The ongoing documentation of minutes and other data also contributes to dependability and conformability.

Dependability

To guarantee dependability, the research, the processes and the methods need to be documented. This is guaranteed by both the published and the unpublished reports, as well as by electronic documents. This access to the inquiry's paper trail gives other researchers the ability to transfer the conclusions of this inquiry to other cases or to repeat, as closely as possible, the procedures.

Confirmability

Confirmability refers to the degree to which results can be confirmed or corroborated by others. After completion of the research in the case studies in Eindhoven and in Amsterdam, regular contact was continued with the action researcher in Eindhoven and the program coordinator in Amsterdam. In this way, spin-offs could be documented as well.

To gain insight into the contribution of the thesis as a whole, the concept of single-loop and double-loop learning is applied.

2.9 Single-loop and double-loop learning

To make the learning process more explicit and to clarify how action research contributes to both practice and theory building, the concepts of single-loop and double-loop learning are used. These concepts were introduced by Argyris (1976) for organizational learning processes.

Single-loop learning occurs when errors are detected and corrected without altering the scope or value of the program. Double-loop learning occurs when, in order to correct an error, it is necessary to alter the program or project. Such learning leads to a shift in the way in which strategies and consequences are framed (Argyris

and Schön, 1996). In double-loop learning, the values, (fundamental) assumptions and paradigms behind action strategies are re-assessed. In practice, the distinction between single- and double-loop learning may not always be clear. To put it simply, double-loop learning is learning in more depth.

The different action cycles in this thesis can be interpreted as single-loop and double-loop learning. Within the case studies in this thesis, there are two levels of iteration: 1) changes within the program, e.g. to decide to initiate a new activity and 2) program changes, e.g. to decide to shift the research focus; this actually happened in the Eindhoven case. In those action circles, stakeholders were involved in data collection, analysis and interpretation.

For the thesis as a whole, a double-loop can also be ascribed: 1) the iteration between cases and learning from cases to develop methods, tools and theories and 2) on the basis of the results of the thesis, values, assumptions and paradigms may be reconsidered, and recommendations for future practice and theory building in health promotion may be implemented. Those action cycles are carried out mostly independently from practice but in collaboration with other scientists. Figure 2.3 visualizes the loops in this thesis. The numbers in the figure refer to the corresponding chapters in this thesis. The arrows stand for learning: input for the next chapter (or action cycle). Arrows pointing out to the outer circles stand for input to the main objective of this thesis.

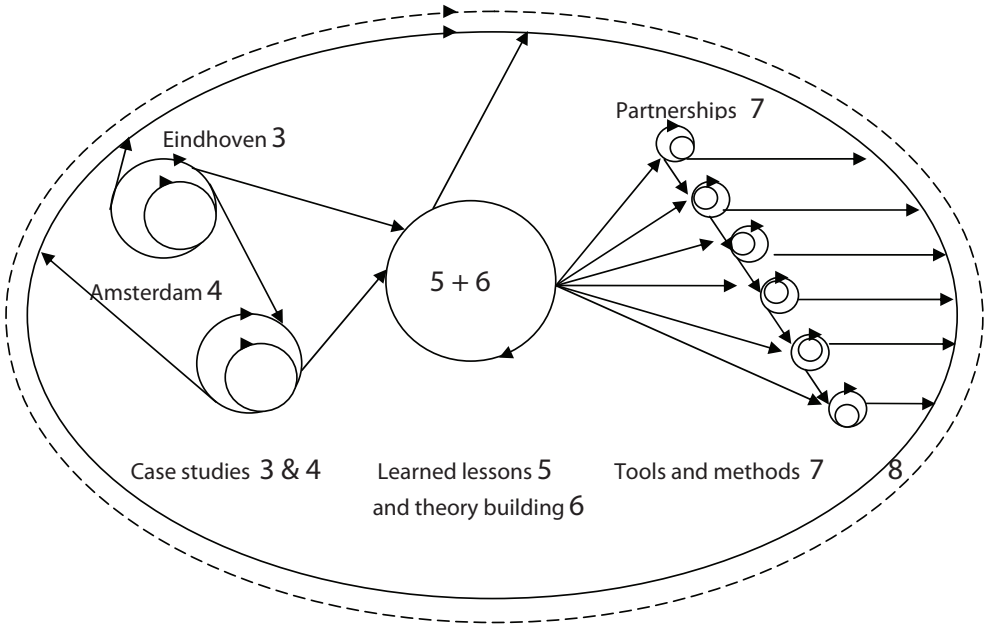


Figure 2.3 Learning by action cycle loops (numbers refer to chapters).

2.10 Research methods and tools for facilitation and evaluation

This section provides a brief description of the research methods and tools used. Also, appreciative inquiry is described, as its principles were applied to the methods and tools developed and used. The section ends with an overview of the methods and tools used in the different chapters of this thesis.

Methods

In all the case studies in this thesis, action research is the main research approach, and consequently provides justification for the methods and tools. The methods were developed in and with the stakeholders in the different cases: Eindhoven, Amsterdam and partnerships (Chapters 3, 4 and 7). The case studies can be best characterized as field research in the sense that they focus on generating realistic descriptions and explanations of a specified situation and address specific problems in that situation. The methods used on the one hand describe and analyze the current situation (e.g. document analyses, field observations, individual interviews) and on the other hand contribute to finding concrete solutions for concrete problems and facilitate decision making in that specific situation (e.g. interviews, focus groups, and feedback and evaluation sessions). Thus, stakeholders were included in the research and affected by the results of the research.

Appreciative inquiry

The principles of appreciative inquiry (Cooperrider and Srivastva, 1987; Cooperrider, 2005) were used in adjusting the items of the tool and the questions and approach in interviews, feedback sessions and discussions, because of its inspiring and positive approach which stimulates participant engagement.

Appreciative inquiry is a strength-based collaborative approach for the study and change of societal realities. The focus on what is known as the positive side of organizing has gained tremendously in popularity and recognition. The positive stance counterbalances the perceived dominance of a deficit discourse as manifested in a focus on a problem-solving strategy (Zandee and Cooperrider, 2008). In Table 2.2 the two paradigms are presented.

Table 2.2 Problem solving and appreciative inquiry

Paradigm 1: problem solving	Paradigm 2: appreciative inquiry
Felt need, identification of problem	Discovery: Appreciating, valuing best of what is
Analysis of causes	Dream: Envisioning, what might be
Analysis of possible solutions	Design: Dialoguing, what should be
Action planning, intervention, evaluation	Destiny: Innovating, what will be

Source: Cooperrider, 2005.

In appreciative inquiry, the starting point is appreciating the value of what already exists and from there envisioning, dialoguing and innovating desired changes. Appreciative inquiry looks for what gives life to a living system or person by asking questions that strengthen an individual's capacity to apprehend, anticipate and heighten positive potential (Cooperrider, 2005).

Appreciative inquiry is, just like action research, an iterative, generative, process that uses collaborative inquiry to enable desired changes. Usually, there are five different phases in the collaborative inquiry:

1. Define. Awareness of the need for change.
2. Discover. Interview process and gathering of life-giving experiences.
3. Dream: Developing images of the future.
4. Design: Developing achievable plans and steps to make the vision a reality.
5. Deliver: Achieving the change.

Appreciative inquiry fits very well with the paradigm of new health promotion, as described by the salutogenic theory and assets approach in section 1.2. Appreciative inquiry is based on the premise that knowledge can enlighten and empower those who strive to change the environment in which they work and live. Thus, it invites the researcher to develop and enable approaches to knowledge creation and usage that are liberating and lead to changes in the social system. Appreciative inquiry invites open-ended, collaborative research (Zandee and Cooperrider, 2008). Appreciative inquiry matches with action research approaches in the sense that it invites the researcher to engage with the complex social world of the stakeholders.

Many of the methods that appreciative inquiry utilizes are applicable within methods used in action research, such as asking positive questions (in interviews and checklists) and organizing group conservations (focus groups and participant checking). Ludema and Fry (2008) define appreciative inquiry as a process of collective learning. It is a process of learning that enables participants in social systems to shape the world they most want by building new knowledge, spurring inventiveness, creating energy and enhancing participation and collaboration.

Tools

Within the case studies, different stakeholders were interviewed individually and different tools were used, e.g. the participation ladder (Pretty, 1995), the participation measurement instrument (Rifkin et al., 1998) (see Box 2.4) and the coordinated action checklist developed and piloted in this thesis (see Chapter 7).

Overview of chapters, methods and tools

Observing and evaluating the fieldwork in the case studies serves as input for the next steps and chapters by connecting the lessons with literature results and, from there, building knowledge for both practice and theory. Here, a more detached view was taken by reflecting on the results, by conceptualization and theorization of the research process and results.

Table 2.3 Research questions, methods and tools

	Content/Addressed research question	Research methods	Tools
1	Justification of research area and goals	Literature review	
2	Justification of research design, methodologies and research criteria	Literature review	
3	What was the value of the methods and tools used in the Eindhoven case to facilitate and evaluate *intersectoral collaboration* as part of the social environment in community health promotion?	Individual open interviews with stakeholders Feedback sessions (participant checking) Document analyses Field observations	Pretty's (1995) participation ladder Participation measurement instrument (Rifkin et al., 1988)
4	What was the value of the methods and tools used in the Amsterdam case to facilitate and evaluate *community participation* as part of the social environment in community health promotion?	Individual open interviews with key informants and with citizens Focus group interviews with key informants and citizens Feedback and evaluation sessions Document analyses Field observations	Pretty's (1995) participation ladder Participation measurement instrument (Rifkin et al., 1988)
5	What are the challenges for coordinated action on health promotion and what *factors* are important *in achieving and sustaining coordinated action for health*?	Literature review	
6	What concepts belong to the *social environment of health* and how can the concepts be defined and conceptualized into variables to be used in action research?	Literature review	Audits with the Health Promotion Framework (Saan et al., 2007b)
7	What tools can be (further) developed based on variables that facilitate and evaluate *changes in the social environment* in community health promotion?	Focus group interviews with citizens Individual open interviews with citizens Field observations Document analyses	Coordinated action checklist
8	Main research objective: To gain the knowledge required to contribute to the development of methods and tools that facilitate and evaluate community health promotion, and to contribute to the development of theory in relation to health promotion	Field observations Experiences as action researcher and advisor Reflection and analyses on case studies Literature review	

Box 2.4 Measurement instruments

The participation measurement instrument was developed by Rifkin et al. (1988). The instrument assesses the functioning of a collaboration in relation to needs assessment, leadership, organization, resource mobilization and management. The participants are asked to score the different items. The individual scores are summarized and fed back into the collaboration. Reflection and discussion of results with the participants illuminate the problems and challenges, and enable participants to identify elements for improvement for future collaborations. Pretty's (1995) participation ladder is based on Arnstein's (1969) eight-rung participation ladder. The top of the ladder reflects a purely bottom-up approach. Community members have full control, whereas professionals have only a supporting role. The bottom of the ladder reflects a purely top-down approach, in which professionals have full control: there is no participation. Pretty's ladder identifies seven levels: no participation, passive participation, participation by information giving, participation by consultation, functional participation, interactive participation and self-mobilisation. Participants in a program are asked individually to indicate which level according to their own perception exists and is desirable. The individual scores are summarized and fed back into the groups that provided the information.

In the last chapter of the thesis, the multiple perspectives of knowing, triangulation of methods, tools and theories, and the connection of judgments to discussion in the current literature results in the contribution of this thesis to knowledge in both theory and practice.

Table 2.3 presents an overview of the chapters and methods and tools used.

3

Participatory action research to promote intersectoral collaboration and community participation: The experiences with *Wijkgezondheidswerk* in Eindhoven

Annemarie Wagemakers
Maria Koelen
Peter van Nierop
Yvonne Meertens
Josje Weijters
Gitte Kloek

Published in Dutch in *Tijdschrift Gezondheidswetenschappen*, 2007; 85(1): 23–31.

(Translated with permission of *Tijdschrift Gezondheidswetenschappen*)

Abstract

In 1999 the Municipal Health Service (MHS) in Eindhoven started the community-based intervention program *Wijkgezondheidswerk* in two deprived neighborhoods. The aim of the program was to reduce socio-economic inequalities related to health in both neighborhoods. To achieve this aim the MHS, in collaboration with organizations working in the neighborhoods, initiated several activities with and for inhabitants. The Netherlands Organization for Health Research and Development (ZonMw) provided funding for the accompanying research activities and Wageningen University carried out the participatory action research over a three-year period up to 2002. The program has been successful in establishing intersectoral collaboration and initiating community participation. Although *Wijkgezondheidswerk* started as a top-down program, it became increasingly bottom-up over time. The participatory action research has proved to have had a facilitating function, not only in dealing with problems at the start, but also in the continuation of the project and in aligning practice with the various areas of research during the course of the program. Participatory action research, then, can be seen as an intervention which facilitates intersectoral collaboration and community participation, thereby generating community support.

3.1 Introduction

In Eindhoven, neighborhoods display considerable disparity in relation to health status, life style and living conditions (Gemeente Eindhoven, 2000). Within the framework of the Healthy Cities Policy, the municipality of Eindhoven has designated a number of neighborhoods with an accumulation of problems as so-called *impulse* areas; these are areas needing extra policy initiatives to address a range of issues. One such initiative is the pilot program *Wijkgezondheidswerk* (Working on Healthy Neighborhoods) in the neighborhoods of De Bennekel and Tivoli. Compared with other neighborhoods in Eindhoven residents here include more smokers, consume less fruit and vegetables and take less physical exercise, while obesity and excessive alcohol consumption are more prevalent. In 1998 the Municipal Health Service (MHS) in Eindhoven started up the *Wijkgezondheidswerk* program, with the overall aim of reducing socio-economic inequalities in health. To achieve this aim the MHS sought to improve the health of the inhabitants of the *impulse* areas by initiating, together with them, life style activities in the fields of physical exercise, smoking, alcohol consumption, nutrition and relaxation.

The *Wijkgezondheidswerk* program is based on the principles of community-based health promotion (Mittelmark, 1997; Wenzel, 1997; WHO, 1998). The assumption is that community-based programs better answer the needs and wishes of groups with a low socio-economic status (Mackenbach and Bakker, 2003; Mackenbach and Stronks, 2002). This approach aims not only to increase skills towards healthy behavior at the individual level, but also explicitly to address changes in the social and physical living contexts (Kickbush, 1986; Rootman, 2001; WHO, 1986; WHO, 1997). Paying attention to these life style contexts has a positive impact on health behavioral changes (Barras et al., 1996; Mechanic, 1999), thereby side-stepping the tendency to 'blame the victim' (Bracht, 1990; Green and Kreuter, 1991).

To bring about changes in the social and physical environment, social support and backing is essential. This support and backing relates to individual choices by the community (regarding for example healthy behavior), as well as societal changes (such as political will, and the support of organizations and the media) (Saan and De Haes, 2005). Intersectoral collaboration and community participation are key strategies in building such support. Intersectoral collaboration is defined as 'a recognized relationship between (parts of) different sectors of society, which has been formed to take action on an issue to achieve health outcomes in a way which is more effective, efficient or sustainable than might be achieved by the health sector working alone' (Koelen and Van den Ban, 2004, p.139). Community participation refers to the process that involves community members in identifying their needs, setting priorities, and in the development, implementation and evaluation of activities aiming to achieve those outcomes (Koelen and Van den Ban, 2004, p.138).

Although research literature points to the promising potential of community-based health promotion, it is also acknowledged that there is as yet little evidence of the effectiveness of community health promotion (Koelen et al., 2001; Øvretveit and Gustafson, 2003; Programmacommissie Sociaal-Economische Gezondheidsverschillen,

2001; Speller, 1997). The measured effectiveness of a program depends on both the outcome variables used, and the time span over which it is measured: it takes time to change behavior.

The *Wijkgezondheidswerk* program in Eindhoven was accompanied by research financed by the Netherlands Organization for Health Research and Development (ZonMw). The Erasmus University in Rotterdam used a quasi-experimental design to measure change in health behavior at the population level. The design consisted of a baseline measurement and a follow-up measurement two years later, in both an experimental group and a control group. For more information on this research, see Kloek (2004). The participatory action research carried out by Wageningen University was aimed at gaining insight into the degree of support for the community health program and the manner in which this was achieved. To measure these aspects the concepts of 'intersectoral collaboration' and 'community participation' were used.

This article describes the participatory action research as follows. First, the methodology regarding the *Wijkgezondheidswerk* program and the participatory action research is discussed. Then the outcomes are dealt with, in particular how intersectoral collaboration and community participation were realized after conquering initial problems and realigning the objectives. In the discussion and conclusion of this article these outcomes, measurement issues and the role of the participatory action research are considered in more detail.

3.2 Methodology of the *Wijkgezondheidswerk* program

In 1998 the MHS initiated the program by contacting organizations working in the target neighborhoods. After expressing their interest in collaboration, the MHS, in conjunction with the Erasmus University of Rotterdam and Wageningen University, applied for and was given a grant by ZonMw, which resulted in the official launching of the project in October 1999. Project groups, representing professionals of collaborating organizations and representatives of inhabitants, were set up in both neighborhoods. The project groups, responsible for identifying, developing and implementing health promoting activities in their neighborhood, maintained contact with the residents, the organizations involved and the Community Advisory Board. The Community Advisory Board, consisting of managerial staff from the collaborating organizations, facilitated collaboration between the different organizations and created the preconditions for activities to take place. A steering committee, which included representatives of the MHS and both universities, dealt with the coordination between activities and research. At the national level input was provided by another steering committee, one that had also been involved in community-based interventions in Rotterdam (De Haes et al., 2002; Voorham et al., 2002). The program was coordinated by an MHS worker. The organization of the program is presented in Figure 3.1.

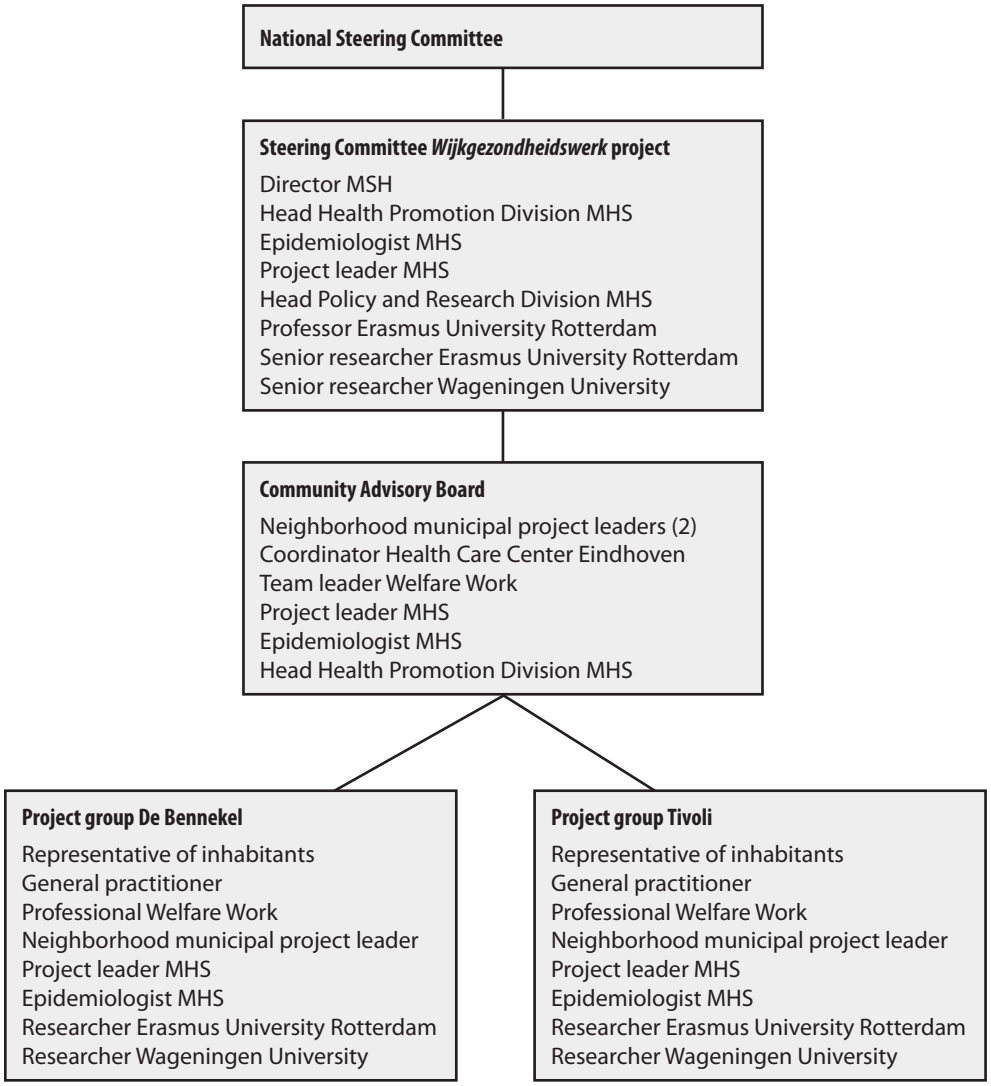


Figure 3.1 Structure and organization of the *Wijkgezondheidswerk* program in Eindhoven.

3.3 Action research

Evaluating the effectiveness of community-based health promotion is no easy matter (Alting et al., 2003a; 2003b; Coombes, 2000; Israel et al., 1995; Merzel and D'Afflitti, 2003; Nutbeam, 1999; Rimer et al., 2001; Rootman et al., 2001; Saan and De Haes, 2005; Tones, 1999). The context and input relevant to stakeholders influence choices about goals and interventions, as well as research and evaluation questions, and as a consequence also influence research methodologies (Alting et al., 2003; Koelen and Van den Ban, 2004; Koelen et al., 2001; Saan and De Haes, 2005). An action research approach was chosen in order to gain insight into the input of relevant stakeholders and to make this input available for consideration and even of immediate use within the *Wijkgezondheidswerk* program.

Action research is characterized by the fact that results are continuously fed back into the program so that use can be made of them in the decision-making about 'how to carry on' (Koelen and Vaandrager, 1999). The action researcher´s crucial role consists of gathering and channeling back relevant information, as well as inventorizing problems and possible solutions; she or he works together with all stakeholders and looks after both the individual and the common interests.

Action research has two functions: evaluation and action. The evaluation function consists of assessing the quality and extent of intersectoral collaboration and community participation, as well as the problems, needs and wishes of stakeholders. The action function is linked to the feedback of the results and gives direction to the progress of the program: when opportunities occur they are taken advantage of, and when problems arise they are quickly solved (Koelen et al., 2001). Such feedback encourages the involvement and motivation of people (DiClemente et al., 2001) and at the same time stimulates collaboration between workers on the ground and researchers.

In Eindhoven, four evaluation rounds were carried out. In each round, the project group members in De Bennekel and Tivoli, the members of the Community Advisory Board and the Steering Committee were individually interviewed. The questions probed the expectations that the stakeholders had about the *Wijkgezondheidswerk* program, the perceived benefits of the program and the input that stakeholders were able and willing to invest in the program. As concerns activities, questions were asked about what actions were taken and who was involved. To get insight into collaboration processes, questions were asked about existing networks, contacts, people's assessment of collaboration, and factors that limit or stimulate collaboration. In the third and fourth evaluation round, moreover, data on collaboration and participation was gathered using Rifkin's participation measurement instrument (Rifkin et al., 1988; Rifkin, 2000). In a spider web model, the participation level of the organizations involved was visualized with regard to the following five items: needs definition, organization, management, resource and manpower mobilization, as well as leadership. Stakeholders were asked to score each of these items on a five-point scale, whereby a score of 1 indicates that one organization is responsible for the item concerned, and a score of 5 that all organizations are equally responsible. To measure community participation, Pretty's participation ladder (Pretty, 1995) was used. The ladder consists of seven levels,

reflecting no participation (level 1) to full participation (level 7).

After each evaluation round, the researcher summarized the findings in a report relating to each neighborhood, and this report was presented and discussed in the meetings of the two project groups, the Community Advisory Board and the Steering Committee. Discussion of the results focused on the achievements of the program, the opportunities and problems experienced, and on how to continue the program. The outcomes of the discussions were noted and incorporated in the description of the results.

3.4 Results

Getting started

The first *evaluation round* was held in December 1999, shortly after the official start of the program (Wagemakers, 2000). Emphasis was placed on the collaboration process: what is the role and position of stakeholders in the program, what input can and will they deliver, what are the expectations for the program and what are the limiting and stimulating factors for progress? The results of the interviews show that the will to collaborate was considerable, yet the program was at an impasse. To begin with, a year had elapsed between submitting the grant application (1998) and its approval. Although there had been meetings in which plans were discussed, no activities were set up. The postponing of activities was also due to the fact that the quasi-experimental design of the Erasmus University required a baseline measurement before activities could be set up. Furthermore, the results revealed that members of the project groups did not support the healthy lifestyle themes (physical activity, smoking, alcohol, nutrition) which had been set beforehand. At the neighborhood level, other priorities existed such as safety, support for child raising and handling of stress and drugs problems. There was also dissatisfaction because the coordination of the program was completely controlled by the MHS. The tasks and roles of the different stakeholders (organizations, institutions and individuals) were not clearly defined, and there was not enough room for initiatives stemming from the neighborhoods. All these problems contributed to dampening the initial enthusiasm and creating a strained relationship among the project group members.

The problems were presented and discussed in the meetings of the project groups, the Community Advisory Board and the Steering Group. Good will returned vis à vis the program when the parties involved, seeing their feelings reflected in the research findings, felt that they were being taken seriously. The MHS also put in extra effort – its director, for example, undertook to attend the project group meetings. The goals of the program were adjusted, and tasks and roles were discussed. In the end the MHS continued to coordinate the program, but responsibility for the program was shared over a number of organizations. In the meetings of the project groups it was decided, on the basis of epidemiological data, that the focus would still be on healthy lifestyle themes, such as physical activity and nutrition, but that there would also be room for

other topics. It then became possible to work out plans for activities and start up the baseline measurement. In both neighborhoods, concrete activities for residents were started in September 2000.

Adjusting program goals

In the *second evaluation round*, held in December 2000, the first task was to see if problem areas had been resolved (Wagemakers and Koelen, 2001). It was found that stakeholders were satisfied with the way in which the MHS coordinated the program and that workers from other organizations had meanwhile joined the project groups. Enthusiasm had returned. One point of concern was that fewer activities had been carried out than planned, due to a lack of workers on the ground and the fact that community participation was not yet up and running. Activities that were being run, rather than focusing on physical activity and nutrition, were mainly directed at children and the elderly – groups that were not part of the research population (18–65 years) targeted in the quasi-experimental design.

Involving residents turned out to take more time than planned. People did not volunteer spontaneously to participate in developing and setting up activities, nor did they come forth to take part in these activities. However, when personally approached, for example by the family doctor, some people would join a 'quit smoking' course. This revealed that not enough account was taken at the beginning of the program of the time needed to involve residents. Therefore, and also due to the fact that the initial ambitions of the *Wijkgezondheidswerk* program could not be realized, it was decided in January 2001 to readjust the program goals. In practice this meant paying more attention to intersectoral collaboration and community participation – aspects that were supported by the action research. In addition, the research focus changed from effect evaluation (by dropping interim measurement) to process evaluation, in which the different activities were evaluated (Kloek, 2004).

Measuring collaboration and participation

In the *third evaluation round* (March 2002) and the *fourth evaluation round* (December 2002) intersectoral collaboration and community participation were measured (Weijters and Koelen, 2002; Weijters and Koelen, 2003). Table 3.1 gives an overview of the scores for intersectoral collaboration in both neighborhoods during the third evaluation round, and an overview of changes between the third and fourth round for De Bennekel. In Tivoli, many of the project group personnel had changed between the third and fourth evaluation round. The new members being unable to compare the current with the previous situation, a comparison between the third and fourth evaluation round could not be made in Tivoli.

The interviews made clear that intersectoral collaboration had increased in the period between the second and third evaluation rounds in both neighborhoods. Stakeholders' involvement and support for the program had increased. The values in Table 3.1 show that the average scores in De Bennekel in March 2002 were a little higher than the average scores in Tivoli. De Bennekel also showed progress between

Table 3.1 Scores on Rifkin's participation measurement instrument items (Rifkin et al., 1988; Rifkin, 2000)

Item	Tivoli March 2002	De Bennekel March 2002	De Bennekel December 2002
Organization	1.8	2.6	4.4
Management	1.8	2.4	2.4
Resource mobilization	2.3	2.5	2.8
Manpower mobilization	3.6	4.3	4.2
Leadership	1.6	1.6	2.0
Needs assessment	3.0	2.9	3.8

1 = one organization responsible; 5 = all organizations responsible.

the third and fourth evaluation round, especially in relation to organization and needs assessment. Manpower mobilization had already drawn high scores in the third round and remained about equal in the fourth. The discussion about the scores revealed that the responsibility for organization, manpower mobilization and needs assessment had become more equally divided over the different stakeholders. Stakeholders said that they were delivering input and capacity to the best of their organization's ability. The fact that coordination of the program was still in the hands of the MHS was not judged to be a negative point; indeed, the general opinion was that coordination should be centrally steered. In addition, the role of the MHS was found to have gradually shifted towards providing the necessary preconditions.

It proved difficult to use Pretty's participation ladder to score the level of participation. First clarity had to be established about the definition of 'community' in 'community participation': does it refer to the residents' representatives, the volunteers helping to set up activities, or to those actually participating in the activities? It is also useful to differentiate activities. A walking tour, for example, was organized and paid for by residents (scoring 6 or 7 on the participation ladder) whereas the health fair (an informative community event concerning health behaviors) was organized by the MHS (scoring level 1 on the participation ladder). Not only new activities were started up in De Bennekel and Tivoli; some also merged with activities already existing within participating organizations. In the space of two and a half years about 60 activities were set up and implemented. Besides events relating to physical activity and nutrition, other activities targeting smoking and alcohol use were carried out. Moreover, courses around health issues for the over-fifties, as well as courses dealing with stress-related complaints were organized at the request of the community health centers. For an overview of examples of activities see Table 3.2.

Although residents took part in many of these activities they were not really involved in their actual organization. As the program progressed, however, people's enthusiasm about participating increased. In particular, representatives of the residents participating in the project groups became more and more actively involved. Whereas initially the MHS tabled the proposals and the others merely voted for or against them, in the end all project group members came up with initiatives for activities. Project

Table 3.2 Examples of activities within the *Wijkgezondheidswerk* program

Theme	Description
Healthy sweets	Information by a dietician on healthy sweets for parents of children at a day-care centre. Children themselves produced healthy sweets under supervision.
Nutrition project	A week of primary school lessons focused on nutrition, with parents receiving information on nutrition from a dietician.
Greengrocer	The local greengrocer advertised special offers in the newsletter.
Ethnic women's party	Nutritional education was available for women from ethnic backgrounds in their own language.
'GALM'	30 one-hour lessons of physical exercise for the over-fifties.
Aqua Slim	Course of 12 swimming lessons and 6 lessons on nutrition for adults.
Health Fair	Community event focusing on healthy behavior.
Tivoli on the move	Community event focusing on physical activity.
Walking tour in summer or winter	Walking event in the surroundings of De Bennekel concluded with a meal.
On the way	Swimming instruction for children and information about swimming lessons for parents of non-Dutch origin.
Quit smoking	Group course to stop smoking under supervision of a teacher.
Health education 50+	Course for professionals and volunteers on how to recognize health and socio-psychological problems of older women.
Feeling good	Course including 6 lessons for women on how to recognize stress complaints and how to relax.
Direct mail newsletter	Newsletter about the program and its activities delivered 7 times to 3000 households during implementation phase in De Bennekel and 10 times to 700 households in Tivoli.

group members indicated that through their involvement with the implementation of activities in the neighborhood they gained a better feel for what was happening there.

In the fourth evaluation round, special attention was paid to the continuation of the *Wijkgezondheidswerk* program and to embedding activities into the regular policy of the participating organizations (sustainability). The interviews showed the project group members' interest in continuing to collaborate with each other in the future, and highlighted that important preconditions for doing so were established. It can be said that collaboration has become more or less structurally embedded in the policies of the participating organizations, as is also evidenced by the fact that in 2006 *Wijkgezondheidwerk* was still in operation, not only in De Bennekel and Tivoli, but also in other neighborhoods in Eindhoven.

Despite the difficulties at the start of the program, the MHS together with participating organizations managed to establish a constructive collaboration in which responsibilities are shared. Both professionals and residents pay more attention to health and health behavior. This is even true for organizations for which health promotion is not a stated objective.

3.5 Discussion and conclusions

Intersectoral collaboration

The *Wijkgezondheidswerk* program in Eindhoven has succeeded in establishing greater intersectoral collaboration; indeed, constructive collaboration between organizations and neighborhoods has increasingly become a matter of course. The difficulties experienced at the start of the program are by no means unique for this kind of project. Research literature repeatedly points to the importance of the stakeholders reaching consensus on goals, methods, tasks and roles in programs to promote health (Bracht, 1990; Goosen et al., 2004; De Haes et al., 2002; Koelen, 2000; Milio, 1997; Rifkin et al., 2000; Voorham et al., 2002; Wallerstein, 2000). It seems to be a recurring practice – and indeed this was the case in Eindhoven – that a small group of professionals writes a program proposal in which the starting points and goals are determined without the stakeholders having been consulted. Similarly, the expectations for the program and the necessary input from stakeholders are not discussed. All this inevitably leads to conflict and stagnation of the program (Goodman et al., 1995; Graham and Bois, 1997; Kreuter et al., 2000; Mendes and Akerma, 2002; Rifkin, 2000; Sullivan et al., 2001; Wagemakers and Koelen, 2001; Wallerstein, 2000).

In Eindhoven the action research approach was instrumental in bringing incipient conflicts to the surface, allowing them to be dealt with soon after the start. Conflicts could be resolved through discussion, and goals, tasks and roles gained in clarity in the process. (Wagemakers, 2000; Wagemakers and Koelen, 2001; Weijters and Koelen, 2002; Weijters and Koelen, 2003). The foundation for intersectoral collaboration and support for the *Wijkgezondheidswerk* program, then, is that stakeholders work together and feel jointly responsible for the promotion of health in the neighborhoods.

Community participation

Consulting the needs and wishes of the community proved to be fundamental to obtaining their involvement in setting up and implementing activities, and the program set this process in motion. The lesson learnt from this project is that collaboration structures must be in place before activities can be developed and implemented - for, with and by residents. Residents do not participate spontaneously, and their involvement is not triggered by a newsletter alone. In most cases personal contact is also needed and this takes time – a fact also noted in other similar programs. In the Dutch program 'Heartbeat Limburg' it was concluded that the establishment and embedding of complex collaboration structures requires at least 10 years (Steenbakkers et al., 2005) and that, even when more time and input is invested, not all subpopulations are reached (Van Assema et al., 2006). Merzel and D'Affiti's (2003) review study, in which 32 community-based programs were evaluated, shows that the involvement of community members in health promotion rarely succeeds. One of the most important reasons for this lies in the fact that professionals and members of the target group gave different priority to the stated topics (Altman et al., 1991; Goodman et al., 1995; Koelen and

Van den Ban, 2004; Sullivan et al., 2001). The fact that such topics as physical activity and nutrition were determined early on by professionals in Eindhoven had a negative effect on motivating residents to participate, because their priorities lay elsewhere. An important recommendation for similar programs is to link the concept of health to the broad WHO definition, so that health is connected to and coherent with topics relevant to the people in the neighborhood.

Another important aspect is that community-based interventions presuppose that there is a community, but is this really the case? (Baum et al., 1997; Guldan, 1996; De Haes et al., 2002; Mittelmark, 2001; Rifkin, 2000; Voorham et al., 2002; Wallerstein, 1999). According to Laverack and Labonte (2000), a community only exists when there is an organized group with which individuals can identify themselves. Considering the size and heterogeneity of the Eindhoven neighborhood, it can be questioned whether the volunteers participating in the project groups were viewed by the other residents as their representatives. Mittelmark (2001) argues that a community only comes into being at the point when people in a neighborhood participate in an activity. Participation in an activity generates a sense of community.

Furthermore, it can be questioned what exactly it is that we are aiming for when we talk about participation. Participation is defined in terms of "participation in needs assessment, in prioritizing and in the development and implementation of health promoting activities" (Koelen and Van den Ban, 2004; Laverack and Labonte, 2000). In practice, it is clear that it is not realistic to expect a large representation of the population to be involved in all phases of a program. It is more profitable to distinguish between types of participation in different phases of the program, such as participation in needs assessment, in initiating, developing and implementing activities, as well as in the actual participation in activities. In practice, different individuals will usually be involved in different stages. Measuring participation becomes simpler and more realistic if the phases, the level of participation and the people participating at each stage, are distinguished. We recommend that further development of the measuring instruments as referred to above be undertaken.

From top-down to bottom-up

In line with the principles of health promotion, the working method in community-based programs is based on a bottom-up approach. Nevertheless, most programs are initiated by a small group of professionals, while other stakeholders – the community included – are involved only once the program has been given the green light by policymakers or funders. At that point the program topics have been decided upon, revealing that a top-down approach has in fact been followed. A process is needed to move gradually from a top-down to a bottom-up approach, so that community members increasingly initiate, develop and implement activities on their own. It is interesting to link this with Rogers and Schoemaker's (1971) typology of social change, presented in Figure 3.2. The authors distinguish two dimensions: the first dimension indicates who defines the problem; the second dimension indicates who provides the solution. In both dimensions the initiative can be internal or external: the community

	Problem solution	
Problem definition	Internal to social system Community	External to social system Professionals
Internal to social system Community	Immanent change Bottom-up	Selective contact change Bottom-up to top-down
External to social system Professionals	Induced immanent change Top-down to bottom-up	Direct contact change Top-down

Figure 3.2 Typology of social change according to Rogers and Schoemaker (1971).

(bottom-up) or the professionals (top-down). When both dimensions are internal, change is spontaneous without an external intervention. Conversely, when both dimensions are external, participation of the community is not, or hardly, present. In the two other cases, variations of change can be seen. When residents experience a problem, they can approach professionals for solutions, in which case there are selective contacts with professionals. Induced change takes place when professionals identify a problem, a solution to which is then worked on by residents.

In Eindhoven activities were initially started up by the professionals. As the program progressed more and more activities were organized in collaboration with community members, the popular health fair being a good example here. As time went on activities (such as the walking tours) were also initiated by community members, showing that, in time, professionally initiated programs can become (partly) community initiated.

Practice-based research

The action research showed that the interests of the practice of the *Wijkgezondheidswerk* program did not always match those of the quasi-experimental design, in which individual behavior change was measured. At the individual level, the failure to find hardly any measurable changes in behavior (Kloek, 2004) can be attributed to three reasons.

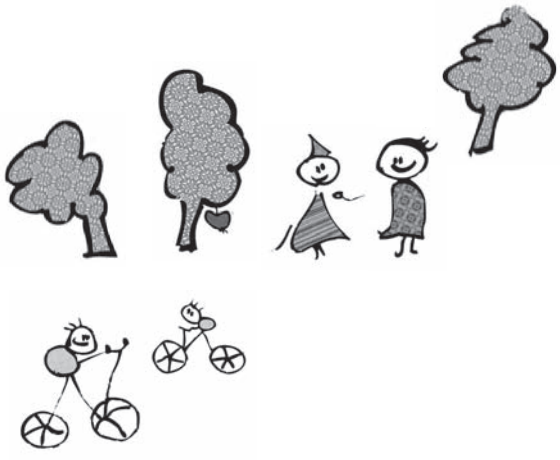
First, the time span between measurements was too short. A quasi-experimental design needs a baseline measurement. Before such measurements can be carried out, program goals must have been formulated and the themes on which activities are based must have been established. In Eindhoven the scientifically motivated goals did not match the priorities indicated by the workers on the ground and the community members. Thus, the original goals had to be adjusted, and as a consequence the baseline measurement of the quasi-experimental design was delayed. This resulted in a time span of only two years between the baseline measurement and the follow-up measurement. Secondly, most activities were directed at children and the elderly, groups which were not part of the research population targeted by the quasi-experimental design (18–65 years). Thirdly, the themes of many activities were not related to physical activity or nutrition and therefore were outside the scope of the quasi-experimental design.

In all probability, other community-based programs will also show little effect at the individual level. This does not so much reflect on the effectiveness of community health promotion, as on the need for the preconditions to be met, as the above three points demonstrate. A separate evaluation of activities in this type of program, therefore, deserves recommendation.

Action research as an intervention

Action research has been shown to contribute to an effective collaboration and to greater stakeholder participation. Stakeholders learn from their experiences and are stimulated to undertake action and solve problems. Action research can be seen as an intervention that stimulates intersectoral collaboration and community participation and therefore also generates support. It was demonstrated that collaboration and participation do not occur spontaneously but result from a learning process, and such processes are time-consuming. These processes are comparable to Rogers' (1995) theories on diffusion of innovations. Some individuals and organizations are quickly prepared to work on something new (innovators, early adopters); others are more wary and will join only after results are visible (late majority). The program has clearly revealed that communication, both internal and external, is of major importance for the success of a project in which so many different stakeholders collaborate. Feedback contributes to the involvement and motivation of people (DiClemente et al., 2001) and stimulates collaboration between workers on the ground and researchers (Health Development Agency, 2000; De Koning and Martin, 1996).

Action research brings problems to light in such a way that they can be discussed and solved. In this sense, the program has developed as a truly participative instrument in which all stakeholders (professionals, workers on the ground, residents, and researchers) are taken seriously and have a voice in decision-making. Ideally such collaboration should exist in all phases of a program, from problem formulation to evaluation (Israel et al., 1995; Koelen et al., 2001; De Koning and Martin, 1996). In practice, programs will often develop as in Eindhoven: initiated from the top down, with a gradual sliding towards the bottom-up approach with the passing of time.



4

Participatory approaches to promote healthy lifestyles among Turkish and Moroccan women in Amsterdam

Annemarie Wagemakers
René Corstjens
Maria Koelen
Lenneke Vaandrager
Hilda van 't Riet
Henriëtte Dijkshoorn

Promotion & Education,
2008; 15(4): 17–23.

Abstract

Although it is recognized that community health promotion succeeds or fails by level of participation, effectiveness and benefits of community programs are underestimated, because participation is seldom monitored and evaluated. In the Dutch 'Healthy Lifestyle Westerpark' program in Amsterdam, participation was both the main working principle and the main goal.

Between 2003 and 2006, the Municipal Health Service (MHS) carried out a qualitative study on the background of overweight in Turkish and Moroccan women aged 25 to 45 years and on possibilities for promoting health with and for the target group. The aim of the program was to increase the women's participation and to evaluate participation levels in all phases. The research aim of this paper is to contribute to the development of participatory methods.

Needs assessment and intervention development phases resulted in implementation of aerobic lessons and nutrition interventions. In the evaluation phase, participation levels were measured using Pretty's typology in focus groups.

Results show that women appreciate participating in the program. Increase in physical activity was not measured. Women's knowledge about healthy food increased, women changed behavior by buying healthier food ingredients and women continued to participate.

Participatory approaches facilitate participation at the desired level in the different phases of the program. Participatory approaches are time-consuming but worthwhile. Pretty's typology is useful to measure degree of participation, although methods can be improved and the meaning of participation should be reconsidered.

The added value of this article is twofold: 1) it demonstrates that participatory methods and tools both facilitate and evaluate participation, and 2) it shows how to evaluate the degree of participation.

4.1 Introduction

Today's health promotion is based on the vision that health is influenced not only by biological factors, but also by lifestyle and factors in the social and physical environment (WHO, 1986; WHO, 2005). This 'broad' vision on health means developing supportive environments, creating sustainable public policies and laws, building partnerships, and strengthening networks. At the community level, health promotion brings together actions directed at strengthening the skills and capabilities of individuals, and actions directed towards changing social, environmental, and economic conditions that may have an impact on public and individual health (Koelen and Van den Ban, 2004). This fits the definition of community health promotion: 'a participatory empowering equity focused process – one that regards community participation as being essential to every stage of health promoting actions as well as one that leverages community assets and knowledge to create the necessary conditions for health' (Nishtar, 2007, p. 61).

In line with this definition, the 'Healthy Lifestyle Westerpark' program used participatory action and research as both a means and an end to improve the health of Turkish and Moroccan women in Amsterdam. The rationale for the program was the high prevalence of overweight among women in those ethnic groups.

Dijkshoorn et al. (2003) assessed ethnic differences in behavioral risk factors by comparing first generation migrants in Amsterdam with the host population. Even after correction for a number of determinants, such as socio-economic status, the prevalence of overweight among immigrant groups is higher. In other studies, similar results were reported for Amsterdam (Cornelisse-Vermaat and Maassen van den Brink, 2007; Uitenbroek et al., 2006) and Western Europe (Uitewaal et al., 2004), showing immigrants having a higher risk of becoming overweight and having a significantly higher Body Mass Index (BMI) than the native people. Although these studies provide well documented insights into the prevalence and magnitude of differences in health status and behavioral risk factors on the population level, the factors that explain the causes of the differences are not explained nor is it indicated what possible interventions are suitable to address these health inequalities. The Municipal Health Service took up this challenge for Turkish and Moroccan women in Westerpark, a neighborhood in Amsterdam; this fitted very well at that time with the aim of local policy in Amsterdam to promote the health of people with low socio-economic status, a cohort in which ethnic groups are over-represented (Verhoeff and Hesdahl, 2004).

On 1 January 2004, Westerpark had 33,317 inhabitants (Van Zee and Hylkema, 2004). More than half of the total population is of native origin (53%), 8% is Moroccan and 3% is Turkish. Westerpark is one of the older neighborhoods located west of the center of Amsterdam and it is characterized by its many relatively small houses. Sixty-three percent of the houses are rented by social housing cooperatives. Socio-economic status in Westerpak is low compared to the overall average in Amsterdam: in 2000, household income was €18,700 per year compared to €22,300 in Amsterdam; in 2004, the unemployment rate was 11% compared to 10% in Amsterdam.

The program was developed by participatory approaches, actively involving the community, and participation levels were evaluated.

The aim of this article is twofold: first, to gain a better understanding of what community health promotion involves, using participatory empowering methodologies among migrant population groups; secondly, to contribute to the development and use of participatory methods and tools to facilitate and evaluate the degree of community participation.

4.2 Community participation

Community participation is an important principle of health promotion (WHO, 1986; WHO, 2005) and can be both an objective (outcome) and a means (process) to achieve improved individual and population health.

Community participation contributes to the size and quality of networks, social relationships and cohesion, which, according to the literature, contribute to health. People with robust and diverse networks lead healthier and happier lives than those who are more isolated. Supportive social relationships can reduce the probability of individuals adopting unhealthy behaviors by minimizing the impact of daily stressors or stressful events (Berkman and Glass, 2000; Heaney and Israel, 2002). Cohesive societies tend to experience better health outcomes (McNeill et al., 2006) and self-reported health status (Kawachi and Berkman, 2000) and, at the neighborhood level, quality of life (Drukker, 2004).

Community participation is a complex process due to 1) the multiple goals to be reached by assessing multiple determinants of health problems, and 2) the multi-actor environment in which multi-layered strategies are executed through various channels (e.g., face to face, media) aimed at several target populations (e.g., sport clubs, stores, migrants) (Zakocs and Edwards, 2006). This complexity makes it difficult to set up, maintain, monitor, and evaluate community health programs. Several authors agree that action research can be supportive in different phases of the program and in evaluation research because of its combined evaluation and action function (Butterfoss, 2006; Koelen et al., 2001; Rice and Franceschini, 2007; Roussos and Fawcett, 2000).

Participation in the different phases of the program can be based, very pragmatically, on the premise that participation fosters higher levels of motivation and enhances the effectiveness of interventions (Pretty, 1995; South et al., 2005; Watson, 2002). This instrumentalist or functionalist argument, in which participation is used to connect the needs of the target group with the existing social structures and organizations, is the one most commonly used in Dutch programs to promote health (Harting and Van Assema, 2007). Other reasons for the impulse towards participation are communitarian, educative, and expressive (Litva et al., 2002). The communitarian argument relates to the common interests of a particular community, with the assumption that the citizens' expertise should lead to a more appropriate intervention. Educative arguments are concerned with the development of citizens' senses of competence and responsibility. This can be linked with the concept of empowerment, at both the individual and community level (Koelen and Lindström, 2005), and also with the fourth argument, the expression of political identity and belonging, e.g., the rights of individuals to have a voice (Pretty, 1995; Watson, 2002).

Community participation assumes different stakeholders to have equal voices. In reality, however, the work in community programs is professional-led, and the levels of participation by the target group are generally quite low (Koelen and Van den Ban, 2004) and not equal in the different phases of a program. Methods and tools to evaluate participation should take account of different levels of participation by different stakeholders in the different phases (Naylor et al., 2002; Wagemakers et al., 2007a).

4.3 Participatory action in the Westerpark program

The aim of the healthy lifestyle program was to gain insight into the factors contributing to the high prevalence of overweight among Turkish and Moroccan women in the age range 25 to 45 years, and into the possibility of developing interventions in collaboration with the target group. On 1 January 2004, 591 Moroccan women and 204 Turkish women between 25 and 40 years of age were living in Westerpark, of whom 70% first generation migrants (Van Zee and Hylkema, 2004).

The program had four different phases: needs assessment, intervention development, implementation, and evaluation. In all phases, community action and research went hand in hand.

The needs assessment sought to identify individual health behavior factors and environmental factors (socio-cultural and physical) that contribute to the high prevalence of overweight. In-depth interviews were held with 33 key informants: women working in health care or welfare and women representing the target group. A topic list was used to identify both the perceived causes of overweight and opportunities for developing interventions. Next, the results of the in-depth interviews were checked and prioritized in six focus groups with 63 Turkish and Moroccan women. Factors with the potential to prevent and reduce overweight were selected to determine, develop, and implement interventions. To structure and evaluate the focus groups, open-ended topic lists were used. The women were rewarded with a €15 gift coupon. The needs assessment also facilitated the set-up of a local project group to build and maintain support at the political and organizational level, which was evaluated by interviewing the members individually, using open-ended questions.

In the intervention development phase, 45 women participated in deciding which interventions should be developed and how, in subgroups on specific themes. The subgroups were guided by the MHS professionals. The meetings were in Dutch. Interpreters were available to translate if necessary. Images and text on a white-board were used to discuss and reach consensus about the activities to be developed.

In the implementation phase, the activities were organized, also in subgroups. Activities were evaluated using Turkish or Moroccan language questionnaires. Participants were asked about what they learnt from the activity, their intention to change behavior and their appreciation of the activity.

In the evaluation phase, 14 migrant women participated in two subgroups to assess participation in the program. An open-ended questionnaire (for topics and example questions see Table 4.1) was used to structure the meeting.

The focus group meetings and interviews in all phases of the program were

Table 4.1 Topics and example questions in the open-ended questionnaire to assess participation of migrant women in the program

Topics	Example questions
Participation in the program	In which phase of the program did you participate? How did you experience your participation in the focus group meetings?
Contribution to the program	Were you able to give your opinion in a proper way? Was your opinion taken seriously? Were decisions made together?
Activities	What do you think is positive about the activity? And what is negative? Do the activities take your contributions into account? Do the activities consider barriers you experience, such as costs and time?
The program	What stimulated you to participate in the program? What did you learn by participating in the program? What was the spin-off of the program for you or for the Turkish and Moroccan women in Westerpark?

audiotaped, transcribed and analyzed, supported by Kwalitan software (Peters, 2004). One of the professionals took minutes of the meetings in the intervention development phase. Throughout the program, MHS professionals kept a log. On completion, the program was orally audited by two Dutch experts using a health promotion framework (Saan and De Haes, 2005) to see if and how all necessary steps to run the program were taken. The log and audit provided (process) information on required support and capacity.

The sample of women in this study is a convenience sample: both the key informants and the women were recruited through contacts of the professionals with migrant workers in two neighborhood centers in Westerpark, A and B. The continuing contacts with the migrant workers and the women after the formal completion of the program provide information on the program's spin-offs.

4.4 Measuring participation levels

In the evaluation phase, the level of participation in the different phases was evaluated by 14 migrant women (explained in the previous paragraph), the three MHS professionals, and the seven members of the local project group. Levels of participation were formulated according to Pretty's (1995) typology, see Table 4.2. For the migrant women, levels of participation were translated into understandable questions (see Table 4.1 for topics and example questions). The results of the discussions in subgroups were first individually interpreted by two MHS professionals and later on translated back into Pretty's typology by all three professionals jointly to increase the degree of agreement.

The participation ladder reflects at the bottom a purely top-down approach, in which professionals have full control: there is no participation. The top of the ladder

Table 4.2 Pretty's (1995) typology, adapted for the Healthy Lifestyle Westerpark program

Typology of participation	Characteristics Healthy Lifestyle Westerpark
6. Self-mobilization	Completely bottom-up. The Turkish and Moroccan women make independant decisions, develop their own contacts, and have full control over planning and implementation of activities. Main funding obtained by the women, who have control over its allocation.
5. Interactive participation	The Turkish and Moroccan women are involved in a partnership with professionals from the Municipal Health Service. Decisions are made jointly and the women contribute to resources.
4. Functional participation	The Turkish and Moroccan women are involved in the decision-making process and in developing the activities. The women participate to meet predetermined objectives relating to the program. Professionals still have control and make final decisions.
3. Participation by consultation	The Turkish and Moroccan women are consulted and their views are listened to and acted upon if necessary. Decision-making role lies with professionals. Turkish and Moroccan women participate in activities and during evaluation make suggestions to improve the activities.
2. Participation by information	The Turkish and Moroccan women are informed about the program and activities and participate by answering questions posed by extractive researchers using questionnaires or similar approaches. The findings are neither shared nor checked for accuracy.
1. Passive participation	The professionals of the Municipal Health Service have full control over the program, planning and organizing activities, making contacts, and taking responsibility for funding. The Turkish and Moroccan women are informed of plans.
0. No participation	Completely top-down. The Turkish and Moroccan women are not informed about plans: only about activities they are involved in.

reflects a purely bottom-up approach, in which community members have full control, whereas professionals have only a supporting role. The other stages of the ladder are in between those two extremes. To consider different aspects of participation as well, Pretty's typology (1995) was linked with the so-called participation measurement instrument (Rifkin et al., 1988). This instrument assesses participation in needs assessment, organization, leadership, management, and resource mobilization. Based on previous experiences (Vaandrager, 1995; Koelen, 2000), items were adapted as follows: leadership was replaced by decision-making; management was replaced by manpower, and communication was added as an extra item.

To measure participation levels, both the members of the local project group and the professionals of the municipal health service individually scored the six items on a 5-point scale (where 1 = no participation and 5 = full participation), which matches Pretty's participation levels 1 to 5. The individual scores were summarized and discussed.

Experience from other projects (Vaandrager, 1995; Wagemakers et al., 2007a) has shown that this tool is very helpful, especially when used in combination with other methods such as feedback sessions and discussion groups; this makes it possible to interpret the data and, following from that, take action.

4.5 Results

In the needs assessment phase, Turkish and Moroccan women indicated that they experience overweight to be a problem, mostly because of physical appearance and health (Van 't Riet et al., 2006). Both the women and key informants attributed overweight to unhealthy food habits and lack of physical activity. Healthy and affordable food is available in the shops but the women mentioned their lack of knowledge and skills to change food patterns. The women also experienced their socio-cultural environment as an obstacle to adopting healthier food habits: their spouses want the traditional food and social contacts are usually associated with eating. The women felt that there was a shortage of accessible sports facilities and again the socio-cultural environment prevented them from being more physically active. Many migrant women are housewives, and some Moroccan women need their husband's permission to go outside. Moreover, migrant woman often are not allowed to engage in mixed-group activities. The women indicated that they were interested in participating in both sports activities and healthy food education. Participation in the needs assessment, either by interviews or focus groups, resulted in participation in the development and implementation of two interventions specially developed for the migrant women:

- Aerobic lessons: 'Move together'. The weekly lessons of one hour contain a warming up, talking about physical activity in daily life, physical exercises, and cooling down;
- Nutrition intervention 'Healthy shopping, healthy cooking'. Main activities are a guided tour in a supermarket and in a Turkish or Moroccan shop to distinguish unhealthy and healthy products and two cooking lessons to use healthier ingredients, including in traditional dishes.

In both interventions, special attention was devoted to the socio-cultural norms of the migrant women by discussing how to deal with the environment when adapting new habits.

Thirty women participated in the aerobics lessons and 60 women participated in the nutrition intervention. The results of the questionnaires show that the participants in the aerobics lessons appreciate the lessons but complained about the cost: the lessons were too expensive compared to other (subsidized) activities. Because initially the time at which the lessons were provided did not fit their children's school timetable, the time was changed. During Ramadan it was difficult for the women to continue the aerobics lessons because eating was not allowed during the day. After Ramadan not all women resumed the lessons. Absence or replacement of teachers also caused some women to quit. Increases in the women's physical activity could not be measured due to irregularity and drop-out from lessons.

The women participating in the nutrition intervention all appreciated both the content and the form. Half of the women bought healthier ingredients and successfully tried the dishes with healthier ingredients at home. In total, 120 women (15% of the 800 Moroccan and Turkish women) participated in the program, in one or more phases. Throughout all phases of the program, the women appreciated being asked for their opinion and ideas, and to participate.

Participation levels

At the onset of the program, the MHS team indicated that the desired levels of participation were participation by consultation (level 3) or interactive participation (level 5), depending on the phase of the program. The actual levels of participation, as judged by the MHS, the Turkish and Moroccan women, and the local project group corresponds well with the desired levels (Table 4.3). Thus, levels of participation reached were quite satisfactory.

Participation levels differed in the different phases of the program. Levels of participation reached were lowest in needs assessment and evaluation, and highest in the intervention development and implementation phases.

Table 4.3 Participation of Turkish and Moroccan women, level desired and level reached, according to Pretty's (1995) typology

Phase	Group	Number of participants	Desired level of participation	Level of participation reached according to:		
				MHS	T & M	LP
Needs assessment	Turkish focus groups	35	3	3	3	3
	Moroccan focus groups	28	3	3	3	3
Intervention development	Workgroup A[a]	20	5	4.5	4.5	4.5
	Workgroup B[a]	25	5	4.5	4	4.5
	Subgroup aerobics A	4	5	4	5	4.5
	Subgroup aerobics B	4	5	3	-	-
	Subgroup food Moroccan	4	5	5	5[c]	5
	Subgroup food Turkish	4	5	5	5[c]	5
Implementation	Subgroup aerobics A	4	5	5	5	-
	Subgroup aerobics B	4	5	3	-	-
	Subgroup food Moroccan	4	5	5	-	5
	Subgroup food Turkish	4	5	5	-	5
	Participants aerobics	10(30)[b]	3	3	-	3
	Participants food	55(60)[b]	3	3-5	-	5
Evaluation	Two subgroups	14	3	3	-	-

MHS = Municipal Health Service; T & M = Turkish and Moroccan women; LP = Local project group. [a] A and B stand for the two involved neighborhood centers; [b] Number of women who filled in the questionnaires. Between brackets is the total number of women participating in the activity; [c] Only discussed with the women of neighborhood center A; - No data available. Not all groups were represented in the subgroups in the evaluation phase. The local project group did not have sufficient information to score for all subgroups.

Capacity and support

Professional capacity is essential in both involving the different stakeholders and organizing activities.

The MHS professionals and the migrant and neighborhood workers had regular contact with the migrant women, for example by joining them in activities, organizing activities such as the international women's day, and having informal talks, which contributed to the women's involvement. The women indicated that they were not used to participating in programs like this, and the professionals several times had to explain the roles of both the migrant women and themselves.

The organization of activities is not simple. For example, to organize the 'Healthy shopping, healthy cooking' activity, a coordinator (organizing), a socio-cultural worker (contact target group), and a dietician (carrying out) had to work together. To bring them together and build consensus appeared to be time consuming. Moreover, it required professional capacity and flexibility, especially when interests and views conflicted. In Amsterdam, with regard to aerobics, additional effort was needed to involve the local sports club because they initially had no interest in special lessons for Turkish and Moroccan women. Through the efforts of a professional with strong facilitation skills, the MHS managed to bring the local sports club on board and even to embed the aerobics lessons structurally.

Spin-offs

MHS professionals and the local sports club, together with dieticians and migrant workers from the neighborhood centers, successfully developed activities with and for the migrant women; thus the intervention was experienced as a joint collaboration.

Although funding stopped after two years, the program continued. The aerobic lessons became a regular activity in the local sports club until January 2008. At that time, the teacher changed job and also the number of participants decreased. Consequently, the activity had to stop. Later in 2008, about 10 organizations, policy makers, and eight migrant women developed a strong collaboration structure aimed at offering physical activities to migrant women; this means the program has been restarted.

The MHS and the dieticians are successfully continuing the 'Healthy shopping, healthy cooking' activities on request by immigrant women as part of a new diabetes prevention program in Amsterdam.

4.6 Conclusion and discussion

The Healthy Lifestyle Westerpark program was innovative because participatory approaches were used to investigate the needs of the Turkish and Moroccan women and to develop, implement, and evaluate the intervention on weight management.

The aim of the program was to increase women's participation and evaluate participation levels in all phases. The overall aim of the program was to contribute to the reduction in the prevalence of overweight. Women participated in sporting activities

and bought healthier ingredients to prepare their meals. Both outcomes contribute to weight management. The measurement of weight changes was not the aim in this study. It was neither expected nor realistic that sample size, time span, and amount of effort would result in measurable differences. The study is qualitative and from its successful efforts to increase and sustain participation we draw two lessons: 1) felt needs by Turkish and Moroccan women must match needs defined by professionals, and 2) communication and capacity are essential preconditions.

The research aim was to contribute to the development and use of participatory methods. The study shows how to evaluate participation levels and puts forward challenges, such as how tools can be improved and what exactly is meant by participation and participation level. In this section, we discuss the lessons and challenges and conclude by discussing the value of participatory approaches for community health promotion.

Recognition of need for change

In Amsterdam, the women recognized the problem and felt the need for change. The Turkish and Moroccan women wanted to be engaged because of their interest in managing weight. The input of the women was essential: the choice of type of activities and their content, satisfying socio-cultural needs, stems from the women. This matches with communitarian, educative and expressive arguments for participation (Litva et al., 2002). The interest of the migrant women and their expertise leads to a more appropriate intervention in which women are able to take their responsibility, are facilitated to develop a sense of competence, and are challenged to have a voice.

This program can be characterized as a bottom-up approach, although the topic, overweight, was put forward by professionals, based on epidemiological data. The needs assessment acknowledged the value of community insights and gained the active involvement of members of the community. This distinguishes this program from others, in which professionals, armed with epidemiological data, point out the behavioral changes required to improve health. Although many projects start with the idea of active community participation, failure to put the health promotion principles into practice results in low levels of public participation. Normative needs, that is, the needs defined by experts or professionals according to their standards, often do not meet the felt needs (Koelen et al., 2001; Voorham et al., 2002; Wagemakers et al., 2007a). Triangulation of normative and felt needs probably is the key to success (Watson, 2002).

Communication

Clear and regular communication was crucial in establishing and maintaining the relationship with the migrant women. For the migrant women this program was new because they were not used to participatory approaches. In particular, actively joining in decision making about interventions to be developed was a new experience. The professionals had to communicate the roles of both the migrant women and the professionals again and again to keep the women involved. Communication was also

essential in relation to the needs and expectations of the women; the needs assessment aroused high expectations in the women, but these could not in all cases be addressed by the professionals. If essential preconditions cannot be met, like time and location of activities, the only way to prevent disappointment and a drop-out in participation is to keep communicating with the women; this puts heavy demands on the capacity and expertise of the professionals.

Simply asking women to participate is not enough: asking the women for their experiences and expectations makes clear that their opinions are being taken seriously. Also, asking community members to comment on research findings through group discussion facilitates participation (Koelen and Van den Ban, 2004). In addition, it contributes to understanding the reasons for successes and failures of programs, therefore enabling the improvement of certain aspects of the program (Koelen, 2000; Vaandrager, 1995).

Special capacity is needed to get and keep crucial stakeholders on board, like the local sports club in the healthy lifestyle program. To do so, professionals should have strong facilitating and communicating competencies, as the main issue is not identifying 'what to do' but finding out 'how to get it done'. Health promotion professionals often are used to implementing lifestyle interventions using a top-down strategy. In programs like this, participation objectives and lifestyle objectives are equally important; this demands a number of other competencies as well, such as networking skills (Gilchrist, 2003).

The experience in Amsterdam shows that involving community members is time consuming. It is reported that professionals and institutions are resistant to participatory methods because of the heavier workload involved and the invisibility of direct effectiveness (Rice and Franceschini, 2007). This study shows that indeed considerable efforts have to be made, but that results are worthwhile, especially when a longer time span is considered.

Challenges to measuring participation

Level of participation was measured using Pretty's (1995) participation ladder. As confirmed by others (Andersson et al., 2005; Koelen, 2000; Naylor et al., 2002; Vaandrager, 1995), community members find it difficult to use ranking scales to measure participation levels, mostly because of the language competencies and the level of abstractness required to judge one's own level of participation in the different phases of the project. In assesssing levels of participation, the Turkish and Moroccan women tended to focus the discussion on concrete activities. The professionals had to derive from these discussions the participation levels according to Pretty's typology. Language was an extra barrier because most of the migrant women were not fluent in Dutch. Although ranking the scores makes participation levels visible, discussion about the scores is the most valuable part because it enables action for improvement. This so-called participant check contributes to the validity of the tool. Based on the experience in Amsterdam, the tool should be further simplified.

For the development of tools, more studies like this one are needed to be able to

draw conclusions about their validity, reliability, and feasibility in practice. Only few publications report about validity and reliability (Granner and Sharpe, 2004), because tools need to be adapted to fit the specific program and community context (Roussos and Fawcett, 2000; Wagemakers et al., 2007a).

From the program we learned how to reach and evaluate a certain level of participation, but we are left with questions about whether other levels of participation would have been more appropriate. All professionals and migrant women involved in the program agreed on the participation levels reached, which is probably more important than reaching the highest level of participation. Although participation levels are quite satisfactory and decisions are made jointly, it is obvious that, in reality, professionals organize the program and have more of a say in all phases. This means that even level 5 of Pretty's typology does not imply equal partnership between the professionals and the Moroccan and Turkish women. This might entail that, generally, it is too ambitious to strive for the highest level of participation as indicated in Pretty's typology, for example, to facilitate the migrant women to set up their own sports organization and thus aim for self-mobilization (level 6).

The value of participatory approaches

This program has contributed by showing changes in the women's behavior, participation levels reached, and spin-off from the program: in 2008 activities still continue. From the program we learned that the efforts to involve and sustain community participation are considerable, but, when realized, participants will be motivated to participate.

Participatory processes are lengthy and time consuming due to the time needed by institutions, organizations, and individuals to adapt and accept the issue, the problem, the methods, the actions, and the evaluation. Follow-up over a number of years on the program and its spin-offs should be part of the evaluation to be able to report all results.

Measuring participation is very possible; however, tools can be improved to fit better the capacities of the migrant women. Measuring participation contributes to evaluation of the program but also to the continuation of the program. By discussing participation levels, participants reflect on their own contribution and this may result in increased involvement. Communication, and the capacity to communicate, seems to be the core task and main skill of professionals who work on increasing and evaluating participation levels.

This study also clarifies that participation is much more than just an instrument to contribute to the effectiveness of a program. If participation is taken seriously by addressing the communitarian, educative, and expressive components as well, community assets are strengthened, empowerment on both the individual and community level will increase, and sustained action is stimulated. It is worthwhile to further scrutinize and discuss the concept of participation and its components, both for health promotion practice and research purposes.

More participatory research is needed to convince policy, practice, and science of the usefulness of participatory approaches in their ability to induce social change.

Acknowledgements

Funding for the community intervention research was provided by the Netherlands Organization for Health Research and Development (ZonMW), the Westerpark neighborhood, Amsterdam home care, The Netherlands Institute of Sport and Physical Activity (NISB), and the Municipal Health Service Amsterdam. We are grateful to all women who participated. We also thank the three referees for their comments on a concept version of this paper.

5

What is needed for coordinated action for health?

Maria Koelen
Lenneke Vaandrager
Annemarie Wagemakers

Family Practice,
2008; 25: i25–i31.

Abstract

Due to the multidimensionality of emerging health and societal issues there is an increased necessity for coordinated action, that is, action in which organizations and clients in two or more sectors work together to jointly achieve an outcome. Coordinated action creates opportunities for exchanging activities, expertise, skills and resources. However, the different disciplines are not used to working together.

Coordinated action includes getting involved with working in a new area or setting, with new people, with different backgrounds, knowledge domains, interests and perspectives. In this paper the challenges of coordinated action are discussed. The objective is to identify factors that are important in achieving and sustaining coordinated action for health.

Identification of these factors is based on the authors' experiences with coordinated action in community health promotion and on a review of literature.

Six factors are identified which are important in achieving and sustaining coordinated action: representation of relevant societal sectors including clients, discussing aims and objectives, discussing roles and responsibilities, communication infrastructure, visibility, and management. The success of coordinated action depends on a well-structured process to support involvement, to nurture the collaboration process, and to stimulate communication and the growth of positive relationships. Coordinated action can improve both health and social outcomes, and it has the potential for synergy. It is a challenge into which it is worthwhile investing time and energy.

5.1 Introduction

For many centuries, care for and the improvement of population health was a major responsibility of the bio-medical sector. Together with sanitary reforms, advances in scientific medicine have been of enormous benefit to public health. However, since the middle of the twentieth century chronic diseases increasingly became the leading cause of morbidity and mortality. Overweight and obesity are increasing worldwide. Trends indicate that these health problems are likely to become even more important over the next decade (WHO, 1986; WHO, 2004; WHO, 2005; WHO, 2006), because of the rapid aging of the population and the greater longevity of people with many chronic conditions.

Causes of chronic diseases are often multidimensional. Determinants of health include biological factors, lifestyle (e.g. alcohol abuse, smoking, poor diet, and lack of physical exercise), and factors in the physical (e.g. food, hygiene, environmental pollution) and social environment (e.g. family, community, workplace) and the organization of health care (Lalonde, 1974).

The changing patterns in health problems and in the determinants of health urge us to consider health from a multilevel perspective, beyond clinical and behavioral interventions. Because no one agency alone has the resources, access and trust relationships to address the wide range of determinants of public health problems (Goldman and Schmalz, 2008; Green et al., 2001), (inter)national and local policy makers as well as professional practice increasingly call to optimize population health through coordinated action between a variety of health and other societal sectors. This also was one of the guiding principles adopted at the International Conference on Primary Health Care for achieving health goals (WHO, 1978) and is expressed in the Charter of Ottawa and in the Bangkok Charter of Health Promotion (WHO, 1986; WHO, 2005). Coordinated action can mean that partners in primary and secondary care make referrals to each other, for example in networks for integrated care provision. These networks speed up the referral process and facilitate communicative pathways between the partners (Berendsen et al., 2007). It can also mean that the cure sector (e.g. General Practitioners) works together with other sectors, such as health promotion, social welfare, and local grass root organizations to promote health at community or population level.

Coordinated action for health is more easily said than done. It is not a self-generating autonomous phenomenon, but on the contrary, it involves a learning process. In this paper we critically scrutinize the opportunities and the challenges of coordinated action. We discuss the factors that are important in achieving and sustaining coordinated action, based on the lessons we learned in community health promotion projects (Koelen, 2000; Koelen et al., 2001; Vaandrager, 1995; Wagemakers et al., 2007a; Wagemakers et al., 2008), and on the experiences described in literature.

5.2 Coordinated action

Coordinated action for health is also referred to as intersectoral collaboration, which is defined as 'a recognized relationship between (parts of) different sectors of society which has been formed to take action on an issue to achieve health outcomes in a way which is more effective, efficient or sustainable than might be achieved by the health sector acting alone' (Nutbeam, 1998, p. 14). Participants work together in needs assessment, priority setting, and in the development, implementation and evaluation of actions aiming at the enhancement of health. The added value of coordinated action is generally acknowledged. It creates opportunities for linking or sharing information, activities, expertise, skills and resources between sectors to jointly achieve a defined outcome. Coordinated action is expected to bring about changes in at least two directions. Firstly, it should lead to the improvement of determinants of health and thereby the health of individuals and populations. Secondly, it is expected to increase the awareness of the health consequences involved in policy decisions and organizational practice, within and among different sectors (Green et al., 2001; WHO, 1986; WHO, 2005).

Generally it is accepted that coordinated action can succeed if participants agree on the problem that has to be solved, on the aims and objectives, the roles and responsibilities, and on strategies and procedures to address the problem. However simple and acceptable this may seem, it are exactly these aspects that make coordinated action such a challenge. Coordinated action includes getting involved with working in a new area or setting, with new people, with different backgrounds, knowledge domains, interests and perspectives. Each sector brings in specific knowledge and experience, its own general aims, and its own horizons (Koelen and Brouwers, 1990).

Organizations are designed for specifically described aims and objectives. For example, primary care focuses on individual patients and aims to provide the patient with a broad spectrum of curative and preventive care. Public health and health promotion, on the other hand, focus on the promotion of health of populations and aim to fulfill society's interest in assuring conditions in which people can be healthy. Organizations and societal sectors develop their own philosophy, their own culture, their own value and norm system, and their own rituals. Also, they differently define concepts like health and quality of life.

Getting involved in coordinated action for health therefore may be quite unfamiliar. Studies by, for example, Wallerstein (2000) and Wagemakers et al. (2007a) show that serious conflicts may arise between the collaborating parties because after a while these differences come to the fore. This strongly hampers the collaboration process. Based on the authors' experiences in community health promotion (Koelen, 2000; Koelen et al., 2001; Vaandrager, 1995; Wagemakers et al., 2007a; Wagemakers et al., 2008) and based on reported experiences in literature (Berendsen et al., 2007; Clark et al., 1993; Goldman and Schmalz, 2008; Goodman et al., 1995; Graham and Bois, 1997; Green et al., 2001; Kreuter et al., 2000; Voorham et al., 2002; Wallerstein, 2000), we identify six factors that are important in achieving and sustaining coordinated action. These are: representation of relevant societal sectors, including clients; discussing aims

and objectives; discussing roles and responsibilities; communication infrastructure; visibility; and management. Although these factors are relevant throughout the process of working together, factor 1–3 are especially important for achieving coordinated action, and factor 4–6 are of special relevance for sustaining it. For each identified factor, the value, challenges and suggested strategies are discussed. This is summarized in Table 5.1.

5.3 Factors influencing the success and sustainability of coordinated action

Representation of relevant societal sectors, including clients

Coordinated action for health is necessary because one sector has a limited perspective (Green et al., 2001) and a limited reach across the population. It should involve representatives from a variety of societal sectors, and from both formal and informal organizations. To get these different sectors involved in practice often appears to be quite difficult. Usually there is no history of working together. For example, GPs are not used to work with the public health sector; professionals are not used to work together with clients and vice versa. Moreover, some organizations find it difficult giving up their autonomy and control (Green et al., 2001). In our coordinated action program in Eindhoven for example, the intention was to involve various sectors, including public health, care, cure (GPs), welfare and clients (Wagemakers et al., 2007a). The welfare sector initially was very reluctant to participate because in their opinion, health promotion was no part of their job. By clearly explicating the relation between welfare and health, the contribution they could make, and by involving them in the needs assessment, this sector became motivated to join the program.

In our community programs we experienced that the main challenge in this respect is the under-representation of clients. Simply approaching clients and asking them to participate in needs assessment, planning and implementation of health promotion programs is inappropriate and not successful (Koelen, 2000; Vaandrager, 1995; Wagemakers et al., 2007a, Wagemakers et al., 2008). We learned that involving clients in needs assessment and asking them to comment on research results is a stimulating strategy to get and keep clients involved. Moreover, clients must experience that they have a voice in decision making. To achieve and sustain a satisfactory level of client involvement, it is important that activities are consistent with clients' needs. This may mean that you have to start with other issues then the ones seen as priority by other participants (e.g. professionals). It makes clear to clients that their opinions are taken serious.

Discussing aims and objectives

Participants in coordinated action need to recognize a common mission for the issue on which they are working. This first of all means that they have to agree on the

Table 5.1 Factors influencing the success and sustaining of coordinated action

Process	Factor	Value	Challenges	Solution
Achieving coordinated action	Representation of relevant societal sectors, including clients	One sector has a limited perspective and limited reach	Different disciplines No history of working together Underrepresentation of clients	Explicate the role a sector has in promoting health Involve disciplines in needs assessment Take priorities of client groups serious
	Discussing aims and objectives	Recognition of a common mission Clarification of perspectives results in a strong partnership	Initial assumption that agreement exists Expectations about outcomes remain unspoken	Open communication and explicit discussion to find agreement about problem definition, aims and objectives Acceptance of differences Clear action plan
	Discussing roles and responsibilities	A variety of skills and expertise is needed	Difficult to find a clear definition of roles and responsibilities Participants have to find a balance between working together and getting freedom to fulfil their part of the job in their own way	Role definitions which are consensually developed Doing things together Positive relationships
Sustaining coordinated action	Communication infrastructure	Facilitation of sharing information, ideas and experience	Time consuming Differences in knowledge and communication skills	Formal and informal meeting Building people's capacities to access information (health literacy) Participant self-activity
	Visibility	Incentive for involvement, action and continuation Keep participants motivated Getting political and financial support	Unrealistic outcome expectations discourages the sustainability of coordinated action Invisibility of individual contribution demotivates participants to continue	Not just focus on long term health outcomes but also on short term and intermediate outcomes. Regular evaluation of activities and feedback of results Make contributions of individual participants visible
	Management	A system integrator fulfils a crucial role to structure and maintain the collaboration process	How to get it done is more difficult than what to do Tendency to only focus on achieving a goal Overkill of formal meetings	Initiating debates, making realistic plans reflecting wishes Nurture the collaboration process Timetable for activities, but with flexibility to respond to changes

problem definition and on the aims and objectives of the program they are working on. It is also necessary to 'agree to disagree' on other things. This is, for example, an important precondition for working with health insurers, pharmaceutical industry or for collaboration between organizations with clear differences in mission.

Our studies show that participants in a program initially assume agreement about the aims and objectives. Consequently, discussions about the nature of the problem, about the meaning of concepts such as "health" and "quality of life" almost never take place, and expectations about the outcomes of a program remain unspoken. The program in Eindhoven is a good example. Initially, it seemed that all participants were working in the same direction, but after a while it appeared that researchers were mainly concerned about lifestyle issues whereas clients were more concerned about safety, stress and support of raising children. This caused serious conflicts (Wagemakers et al., 2007a). Our experience also shows that discussions about the underlying differences that induced the conflict can clear the air, after which the collaboration processes run smoothly. Hence, it is especially important, particularly in the start-up phase of coordinated action programs, to start with open communication and explicit discussion to find agreement about the 'mission' of the collaboration initiatives and to find acceptance of the differences that exist between the participants. A clear plan, outlining the goals of each activity, and a timetable for activities helps to structure the process.

Discussing roles and responsibilities

Coordinated action per definition involves a variety of skills and expertise, and the idea is that participants together can achieve more than each participant could achieve alone. It is a challenge, however, to find clear definitions of roles and responsibilities for each of the participants in the program. This has to be consensually developed. Participants have to move to areas that are complementary to their main tasks. For example, most general practitioners are educated in and expected to provide curative care. From research (Van Dillen et al., 2005) it is known that GPs do not feel very confident about their health promoting capacities, due to lack of knowledge, skills and time. Moreover, they experience a lack of patient motivation. It can be a condition that participants in a program acquire competence in a certain area and that they (both clients and professionals) have to be trained in the new roles they have to play (Koelen and Van den Ban, 2004). Open discussion about the potential roles and responsibilities and about the mutual expectations of the contribution provided by all participants is pivotal. Coordinated action depends on involvement and trust (Meijboom et al., 2004). Developing trust is a learning process in which participants have to find a balance between working together and getting the freedom to fulfill their part of the job in their own way. It has to be developed through positive experiences and successes. For example, in Eindhoven, one of the activities was a smoking cessation course, carried out by the municipal health service. Previous experiences showed that it is hard to stimulate clients to take part in such a course. The participating GP took the responsibility to refer clients to the course during consults. This was a successful strategy, which resulted in a

satisfactory number of motivated clients who took part in the course. Hence, actually doing things together (e.g. rapid implementation of small activities) is important for it makes clear how the possible roles and responsibilities work out in practice and it gives insight in how to adjust or to change roles and responsibilities.

Our research clearly shows that an overriding aspect influencing the success of coordinated action is the nature of the relationship between the participants. Getting along well facilitates the willingness to compromise, to share knowledge and expertise, and to share work (Koelen, 2000; Koelen et al., 2001, Vaandrager, 1995; Wagemakers et al., 2007a; Wagemakers et al., 2008). Shared commitment and planning to ensure the resources, mandate, reach, and credibility contribute to the achievement and sustainability of the collaboration process (Goldman and Schmalz, 2008; Green et al., 2001; Wagemakers et al., 2007a; Wagemakers et al., 2008).

Communication infrastructure

Coordinated action is an ongoing process of decision making that requires a flow of regular input of information from and about the participants. It requires a regular assessment of needs, open channels to receive signals from the participants, and discussion with clients. This means that it is important to create a communication infrastructure that facilitates the sharing of information, ideas and experience. Formal and informal meetings are important in this respect. For example in the Amsterdam program, clear and regular communication was crucial in establishing and maintaining the relationship with the clients: migrant women (Wagemakers et al., 2008).

It should be noted however that developing communication infrastructures is time consuming. Moreover, especially in the start-up phase of a program, there might be substantial differences in knowledge about specific topics and in communication capabilities. It therefore is important to place emphasis on building people's capacities to access information when they need it, on developing their ability to experiment and draw conclusions, and on their individual and collective ability to take sound decisions (health literacy). It is also important to put emphasis on participants' self-activity. Telephone, e-mail, databases, Teletext or Internet are suitable for supplying participants information at times when they are actively searching for it.

Visibility

Visibility is important for coordinated action. It functions as an incentive for involvement, action and continuation. Visibility refers to three aspects.

Firstly it refers to *visibility of activities*. Being present at local events, for example, increases visibility. Also specific materials can be helpful, as are national and local media attention.

Secondly, it refers to *visibility of outcomes*. In practice, expected outcomes in terms of changes in behavior and lifestyle, changes in conditions that affect health status, and changes in the health status of a population itself often appear to be unrealistic within the time-span and reach of the program. Such changes often can only be reached in the long term, perhaps in ten to twenty years. Unrealistic outcome expectations will

discourage the sustainability of efforts, since the visibility of results is one of the major stimulating and driving forces for participants to stay on track. Short-term outcomes and intermediate outcomes should be defined in a measurable way to contribute to the visibility of the results of coordinated action. It is therefore important not just to focus on long-term health outcomes (e.g. lower BMI), but also on short-term outcomes (e.g. reach of a program) and intermediate outcomes (e.g. increased knowledge and awareness of a certain problem; reduced number of people making use of individual care; changes in the environment). This requires regular evaluation of activities, and active feedback of results to the coordinated action team, followed by discussion, making action for change possible. Visible outcomes function not only as an incentive for the participants in the process, but also as a means of getting political and financial support from decision makers.

Finally, *visibility of the individual contributions* is productive and keeps participants motivated. It must therefore be clear what the individual participants are contributing.

Management

The management process of coordinated action needs special attention to structure the collaboration process. The main problem may not be to identify 'what to do' but to find out 'how to get it done'. In practice, coordinated action programs tend to focus on achieving a goal rather than to nurture the collaboration process. Managing the process requires leadership and a supporting framework.

A manager or so-called system integrator (Koelen and Brouwers, 1990; Wagemakers et al., 2007a) fulfils a crucial role and needs to have the following characteristics:

- acceptable to the partners
- flexible and reliable
- practical, using available resources
- good at following up on decisions
- enthusiastic and motivated, also a good motivator
- visionary and a good listener
- committed to the program, and have enough time available.

The manager has to maintain a good communication network infrastructure and has to encourage sharing of ideas, experience and information. This also means that the manager has to avoid an overkill of formal meetings. Management includes initiating debates and making realistic plans that reflect the wishes and possibilities of those involved in the program.

The supportive framework refers to a clear structure, outlining the goals of each activity, the roles and responsibilities. A timetable for activities helps to structure the process. The outline should have some flexibility, in order to respond to changes and to incorporate learning experiences into program planning.

5.4 The added value of coordinated action

Evaluations of community health programs (Berendsen et al., 2007; Clark et al., 1993; Goldman and Schmalz, 2008; Goodman et al., 1995; Graham and Bois, 1997; Green et al., 2001; Koelen, 2000; Koelen et al., 2001, Kreuter et al., 2000; Vaandrager, 1995; Voorham et al., 2002; Wagemakers et al., 2007a; Wagemakers et al., 2008; Wallerstein, 2000) clearly shows the added value of coordinated action. Our research shows that coordinated action is a learning process: participants learn from each other and appreciate this; it increases their capacity and self-confidence. This is true for both professional and 'lay' participants.

Working "together" rather than "alongside" can energize people and results in new ways of tackling old problems. What characterizes successful collaboration is the recognition that it is not what people have in common but their differences in view of their expertise, knowledge, capacity, and the organization they work for, that make coordinated action more powerful than working separately. In addition, the enthusiasm of the partners in action strongly stimulates and provides motivation for continued participation in coordinated action. The principle of synergy seems to be very strong (Fries et al., 1998).

Successful coordinated action leads to an active exchange of knowledge and information between sectors. It leads to actions which are consistent with clients' needs and agreed upon by all participants, and it leads to changes in the environment (e.g. accessibility of sport facilities). Hence, coordinated action leads to the improvement of determinants of health and thereby the health of individuals and populations.

Another interesting added value of coordinated action is that it increases the awareness of the health consequences of organizational policy and practice. In our studies for example, commercial organizations or welfare organizations, which initially did not see a task for them in the promotion of population health became induced to explicitly place health on their agenda and in their policy statements (Koelen, 2000; Vaandrager, 1995; Wagemakers et al., 2007a; Wagemakers et al., 2008).

5.5 Discussion and conclusion

Improvement of population health cannot be achieved by the health sector alone. Organizations increasingly have to work together in order to achieve their own goals, and to achieve goals at a higher level. It demands coordinated action from health and other societal sectors, from governmental and non-governmental organizations, and from voluntary and grassroots organizations (WHO, 1986; WHO, 2005). All of these organizations aim to produce their own goods or services. For example, schools provide education, hospitals provide treatment, the police provide safety and security, and cultural organizations provide leisure activities. In coordinated action, organizations move to areas that are complementary to their main tasks – areas with which they are often not equipped to deal. In our experience, conflicts almost always occur, due to initial differences in missions and working procedures, but if the differences are addressed in open discussions, coordinated action becomes successful and the

achievements are far beyond what participants could have achieved on their own.

In this paper we identified six factors which are crucial in achieving and sustaining coordinated action for health. The fact that we discussed them in this order (see Table 5.1) does not mean that coordinated action is a linear and stepwise process which starts with involving sectors, followed by discussing aims and objectives, etcetera. On the contrary, the six factors are strongly interrelated and intermingled.

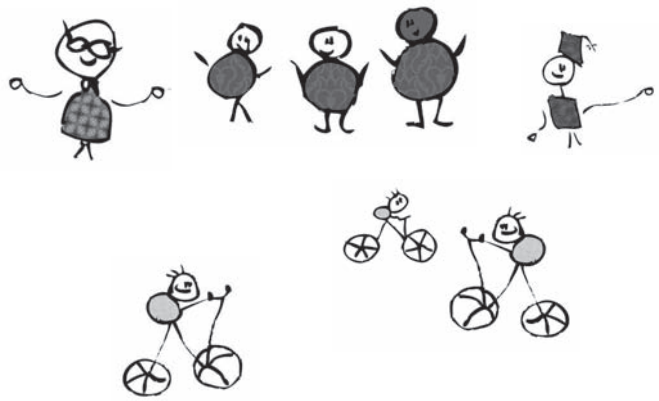
Certainly, representation of relevant sectors, discussing aims and objectives and discussing roles and responsibilities are of major importance to get started. However, they are crucial for sustaining coordinated action as well. Where the overall mission of a coordinated action program may stay the same (e.g. improve population health), the more specific aims and objectives may change throughout time, as a result of the achievements of the program or as a result of actual occurrences and societal changes. When aims and objectives change, new roles and tasks are required, and it might also mean that new sectors need to become involved. This means that aims and objectives, representation and roles and responsibilities are subject to continuous scrutiny. Likewise, the three factors that we discussed in relation to sustaining coordinated action are important in the start-up phase as well.

Sustaining coordinated action requires nurturing of relationships and collaboration processes. Without such attention coordinated action is likely to deteriorate. Therefore, a clear communication infrastructure, good management and visibility deserve continuous attention. Realistic outcome expectations, quick implementation of (small) activities, regular evaluations and feedback on the achievements, and celebration of these achievements are helpful in sustaining enthusiasm.

We can conclude that there are many challenges to the success of coordinated action, but these challenges are outweighed by the many potential benefits, including a learning process and an infrastructure for continuation (Clark et al., 1993; Goodman et al., 1995; Graham and Bois, 1997; Green et al., 2001; Koelen, 2000; Koelen et al., 2001; Kreuter et al., 2000; Vaandrager, 1995; Voorham et al., 2002; Wagemakers et al., 2007a; Wagemakers et al., 2008; Wallerstein, 2000). Despite the endeavor in building networks for coordinated action, and despite all the conditions necessary to make it into a successful enterprise, the added value over single actions of single institutions makes it worthwhile investing effort, time and energy. It increases capacity and self-confidence amongst all stakeholders, and it leads to empowerment at individual and community level.

GPs can contribute significantly to coordinated action for health initiatives. Today's health challenges urge professionals from different sectors and clients to work together for better health and quality of life. The call for more and high quality care is growing but there are limited financial options to meet this demand. Coordinated action is assumed to improve the efficiency of patient care (Berendsen et al., 2007). Only enhancing efficiency of care is not sufficient: efforts are needed to prevent the need and demand for care. When the healthcare sector takes greater responsibility for health promotion and chronic disease prevention as an integral part of service delivery this can also be an important contribution to the containment of rising health care costs (Fries et al., 1998). Therefore, we invite GP's to participate in coordinated

action for health: it enables them to take up their responsibilities in the field of health promotion and it provides them the advantages like getting enthusiastic and stimulated by others.



6

Community health promotion: A framework to facilitate and evaluate supportive social environments for health

Annemarie Wagemakers
Lenneke Vaandrager
Maria A. Koelen
Hans Saan
Cees Leeuwis

Accepted *Evaluation and Program Planning*, 2010

Abstract

The evaluation of community health promotion designed to create supportive social environments for health is still in its infancy. There is a lack of consensus on concepts, a lack of information on interventions that bring about social change, and a lack of feasible methods and tools. Consequently, the effectiveness of community health promotion may not be evaluated under all relevant headings. Therefore, this study aims to contribute to the evaluation of change in the social environment by presenting a framework. On the basis of the relevant literature we describe the relation between social environment and health predicting mediators. We selected participation and collaboration as core concepts in moderating the social environment of health because these terms give insight into the actual dynamics of health promotion practice. We synthesize the results into a framework with operational variables and offer four guidelines on how to apply the framework: use the variables as a menu, set specific aims for social change processes, use an action research approach, and triangulate data. The framework and guidelines enable the start-up, facilitation and evaluation of social change and learning processes and provide common ground for researchers and practitioners to improve the practice of their professions.

6.1 Introduction

Dutch health promotion has a long tradition in health education, but a reorientation towards health promotion, in particular community action for health, is now noticeable. This reorientation is based on the insight that health education, e.g. communication of information, fostering the motivation, skills and confidence necessary to take action to improve health (Nutbeam, 1998a), in itself is not enough to bring about behavioral effects. Health promotion, the process of enabling people to increase control over the determinants of health, and thereby improve their health (WHO, 1986), embraces not only actions directed at strengthening the skills and capabilities of individuals, but also (collective) efforts to change the social and physical environment into supportive environments for health (Nutbeam, 1998a). The influence of environmental factors is recognized now as a central theme in Dutch health policy. Dutch policy indicates the neighborhood as a critical setting to promote health (Ministerie van VWS, 2003), and municipalities are required by legislation to develop and implement local health policies (Ministerie van VWS, 2006).

The social environment spans social determinants of health, which are defined as societal conditions that affect health and that potentially can be altered (Krieger, 2001). The social environment includes the groups or communities to which we belong, the neighborhoods in which we live, the organization of our workplaces, the policies we create to order our lives (Yen and Syme, 1999). Supportive environments for health encompass also people's access to resources for health (like health promotion) and opportunities for empowerment (Nutbeam, 1998a). A supportive social environment is in many cases a prerequisite for change in the physical environment because the social environment subsumes many aspects of the physical environment (Barnett and Casper, 2001). This paper focuses on the local social environment of health.

Community action offers much promise for improving health because of the possibility of modifying the social environment within which people operate (Thompson et al., 2003). However, describing and evaluating the social environment is hampered by a lack of consensus on the definition and operationalization of concepts relating to the social environment (Zakocs and Edwards, 2006), a lack of information on interventions that might improve health through changes in the social environment, and a lack of feasible tools to evaluate environmental changes (Granner and Sharpe, 2004; Roussos and Fawcett, 2000; South et al, 2005). McQueen and Jones (2007) write that, in the search to assess the effectiveness of health promotion, the need for measurable variables is recognized, but few authors specify how these might be obtained. Consequently, social environmental change and processes leading to change are not evaluated in respect of all relevant aspects; this has the potential to result in an undervaluation of the effectiveness of community health promotion programs (Glasgow and Emmons, 2007). Evaluation serves to legitimize a program and make it accountable, and these factors are critical for policy decisions on allocation of money, staff, and other resources. To evaluate the effectiveness of health promotion in all its aspects, feasible methods and tools that report (community) change, and the processes leading to change, are needed. Currently existing, validated tools, with scales that

measure for example social capital, assess only the state or amount of social capital. Science may benefit from this, but measurement in itself does not facilitate change. What practice requires are methods and tools that not only measure but also facilitate change.

To meet the demands of science and practice, we have developed a framework that synthesizes what is known about the relation between the social environment and health, the key moderators for change in the social environment, and operational variables that contribute to the facilitation and evaluation of change in the social environment. The framework is based on our experience in case studies and audits of community health programs in the Netherlands and on insights from the literature. The aim of this paper is to present our framework, its foundation, and guidelines for use.

The paper is organized in three parts. First, we summarize what is known about factors that influence the relationship between the social environment of health, health predicting mediators, and health outcomes, and we identify reasons why evaluating changes in the social environment is still in its infancy. Insight into these reasons clarifies the challenges that have to be addressed. In the second part, after explaining the methodology followed in developing the framework, we define the two key moderators for changing social environments (participation and collaboration) and identify variables which make the social environment operational. The results are synthesized into the framework. In addition, we offer guidelines on how to use the framework. Finally, in the third part we discuss the lessons learned.

6.2 The social environment and health

In the last two decades, the influence of the environment on health has been widely recognized and demonstrated by the rapidly growing and evolving literature on the relationship between health and the social and physical environment (e.g. Anderson et al., 2003; Berkman et al., 2000; Heaney and Israel, 2002; Kawachi et al., 2004; Kelly et al., 2006; Metzler et al., 2007; Wendel-Vos et al., 2007) and explicitly emphasized by (social-) ecological models of health (e.g. Schulz and Northridge, 2004; Spence and Lee, 2003).

In line with these developments, current health promotion practice seeks to bring about environmental changes that, along a continuum of intermediate outcomes, are intended to lead to better health. Social environmental factors influence health predicting mediators such as disease pathways and quality of life, and in the long term affect health outcomes such as health expectancy (e.g. Kawachi and Berkman, 2000; Marmot, 2007; Yen and Syme, 1999). The concept of social capital, "the processes and conditions among people and organizations that lead to accomplishing a goal of mutual social benefit" (Green and Kreuter, 2005, p. 52), is also related to notions such as social cohesion, social support, and social participation. Many researchers agree that social capital has a role in the promotion of health (Kawachi et al., 2004). Social capital has an impact on diseases such as coronary heart disease, mortality rates (Kawachi and Berkman, 2000), self-reported health status (Kawachi and Berkman, 2000; Schultz et al., 2008), binge drinking (Weitzman and Kawachi, 2000) and, at the neighborhood

level, quality of life and subjective mental health (Drukker, 2004).

People with robust and diverse networks lead healthier and happier lives than those who are more isolated. Supportive social relationships can reduce the probability of individuals adopting unhealthy behaviors by minimizing the impact of daily stressors or stressful events (Berkman et al., 2000; Heaney and Israel, 2002). Cohesive and socially integrated societies tend to experience better health outcomes, e.g. lower mortality rates and greater life expectancy, compared to less cohesive and less socially integrated societies (Marmot, 2005; McNeill et al., 2006). Lack of social engagement is associated with depressive symptoms (Glass et al., 2006) and disability (Mendes de Leon et al., 2003). Different types of physical activity are convincingly associated with having social support (Eyler et al., 1999), a companion (Wendel-Vos et al., 2007), or a buddy (Kahn et al., 2002). Health promotion interventions to influence social capital at the same time address empowerment (Hawe and Shiell, 2000). Creating supportive social environments has the advantage that it fosters positive changes in behavior, without blaming the victim (Bracht, 1990; Green and Kreuter, 2005; Spence and Lee, 2003). Moreover, all people exposed to the environment will benefit from it, as opposed to more individually focused interventions, and changes in the environment tend to be more permanent than individually focused health promotion programs (Kelly et al., 2006). The advantages of supportive social environments are thus obvious.

Hence, there is ample evidence of the influence of the social environment on population health, and some theories have already elaborated pathways by which the social environment influences health (e.g. Kawachi and Berkman, 2000; McNeill et al., 2006).

In Figure 6.1 the connection between the social environment, health predicting mediators, and health outcomes (the domains of measurement) is visualized in line with other authors (Anderson et al., 2003; Green and Glasgow, 2006; Schulz and Northridge, 2004; Wallerstein, 2000).

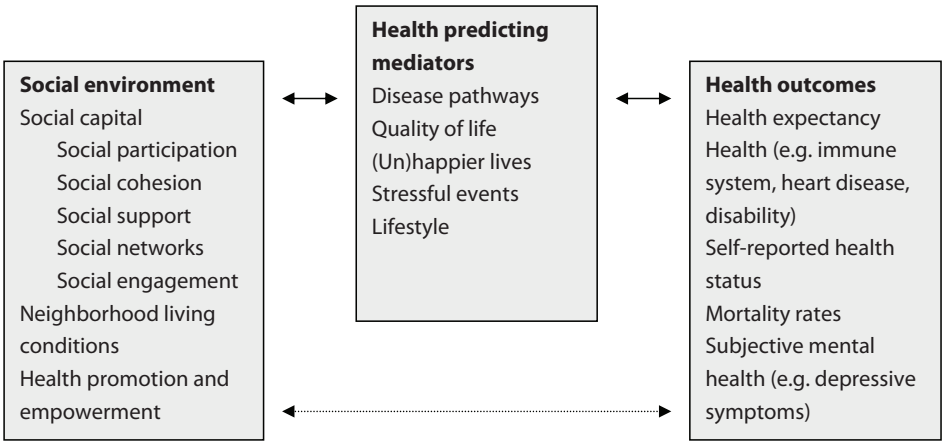


Figure 6.1 The domains of measurement linked to the social environment, health predicting mediators, and health outcomes.

6.3 Challenges in evaluating change in the social environment

The social environment is by its nature multifaceted and dynamic. Addressing and evaluating change in the social environment of health is not easy due to the diversity of goals to be reached by a mix of interventions in a multi-actor environment. The impact of interventions in complex systems such as the social environment of health will always be contextually defined: some expected outcomes will not occur and other unplanned changes will happen instead. On the basis of the literature and previous experiences, we have identified three reasons why evaluating change of the social environment is still in its infancy.

First, social environment concepts are complex in theoretical terms and there is a lack of agreement on definitions (Ebbesen et al, 2004; South et al., 2005; Zakocs and Edwards, 2006). Researchers define the concepts in different ways, depending on their professional background, the setting in which they are working, and so on. Concepts are also intangible in the sense that they have no material substrate like for example a disease, which can often be measured or diagnosed.

Second, social environment concepts can be viewed on different levels: as an individual attribute or as a property of collectives, for example organizations, communities, or entire societies. Greater attention needs to be paid to connectedness across program levels and components (Glasgow and Emmons, 2007). To select variables, two types of approach are possible: 1) using aggregate variables, e.g. aggregating individual responses to social surveys and 2) using intrinsic variables, e.g. direct social observations of communities. It can be questioned whether, for collecting information at the community level or group level, it is legitimate to aggregate individual responses to surveys (El Ansari et al, 2001; Kawachi et al., 2004). Systematic social observation or using intrinsic measures of community characteristics may yield additional information (Kawachi and Berkman, 2000).

Third, social environment concepts can be both an outcome (product) and a process (mean) (e.g. Minkler and Wallerstein, 2008), and both must be relevant to stakeholders and policymakers (e.g. Judd et al., 2001). In terms of our model, we consider health predicting factors and health as final outcomes. The measurement of outcome traditionally did not take into account the processes involved to reach the outcome and often did not take into account that the outcome gained can mean different things to different people in the same program. People may experience, for example, empowerment in one setting but not in another, and at one time but not at another (Laverack and Wallerstein, 2001).

The three reasons indicate that, in evaluating the social environment of health, the challenge is to address: its multifacetedness and dynamic nature, the different levels and experience of a variety of stakeholders, and both process and outcome measures. In our framework and guidelines we seek to cope with all three challenges.

6.4 Developing the framework: methodology

We started developing the framework by selecting community participation and intersectoral collaboration as moderators for the mutual influence between the social environment and health predicting mediators. The selection is based on 1) the lessons we learned in community health programs in the Netherlands, 2) insights from the literature, and 3) consultation with 15 Dutch health promotion experts from practice and science.

First, in the Dutch community health programs in which we were involved as researchers (Koelen, 2000; Koelen et al., 2001; Saan et al., 2007a; Vaandrager, 1995; Wagemakers et al., 2007a; Wagemakers et al., 2008) we learned that intersectoral collaboration and community participation are useful key moderators to facilitate change in the social environment.

Second, we used 17 papers about community health promotion to determine our choice of the moderators. Third, the 15 experts mentioned earlier commented on the idea of selecting participation and collaboration and developing a framework. They supported the choice of participation and collaboration, added ideas to ensure that our route would meet the needs of practice and fulfill scientific standards, and suggested relevant literature to be included.

Next, we conducted an additional literature search in order to identify relevant variables and conditions for participation and collaboration. Our search focused on review papers written in English, published between January 2000 and May 2009, in three frequently used databases, PubMed, Web of Science, and Scopus. Included were review papers about community participation, or intersectoral collaboration, or partnerships in the field of health promotion, describing variables, indicators, tools, and guidelines. Excluded were papers about individual participation (e.g. individual social support), that are disease oriented (e.g. coronary heart disease) and that do not address the community setting (e.g. school, hospital, country), as judged by the first author. This search resulted in 26 reviews. Then we looked at the abstracts to identify the reviews that matched the inclusion criteria; these were then discussed by the first three authors (AW, LV, MK). This resulted in 12 usable review papers (besides the 17 already known) to list variables and conditions. Hence, 29 papers were used to identify variables for the framework. For the guidelines, two additional review papers were found.

6.5 Participation and collaboration as moderators

We focus on participation and collaboration as key moderators in the mutual influence between the social environment and health predicting mediators. Community participation and intersectoral collaboration are core concepts in the present view on health promotion (WHO, 1986, 2005). Community participation is required to design programs that address the social determinants of health, and intersectoral collaboration has great potential for community action for health (Cramer et al., 2006; Wallerstein et al., 2002). Several authors have argued that those concepts are central to its effectiveness and in its evaluation (Butterfoss, 2006; Israel et al., 1998; Jackson et al., 2007; Green and

Kreuter, 2005; Potvin and McQueen, 2008; Rice and Franceschini, 2007; Wallerstein, 2006). Definitions of community participation and intersectoral collaboration offer entry points for evaluation in a manageable and researchable way.

Community participation is defined as a "social process of taking part (voluntary) in formal or informal activities, programs and/or discussions to bring about a planned change or improvement in community life, services and/or resources" (Bracht, 1990, p. 110). Koelen and Van den Ban (2004, p. 138) add that "community members take part in the identification of their needs, setting priorities, identifying and obtaining means to meet those priorities, including the development, implementation and evaluation of those means in terms of their outcomes". Community participation in the different phases of a program can be based, very pragmatically, on the premise that participation fosters higher levels of motivation and enhances the effectiveness of interventions (Butterfoss, 2006; South et al., 2005) and, by extension, health promotion research (Israel et al., 1998).

Intersectoral collaboration can be defined as "a recognized relationship between part or parts of different sectors of society which has been formed to take action on an issue to achieve health outcomes or intermediate health outcomes in a way which is more effective, efficient and sustainable than might be achieved by the health sector acting alone" (Nutbeam, 1998a, p. 360). The idea is that the health sector works together with other sectors that have an influence on health. Coalitions serve as catalysts to bring community issues to the forefront; collect data from hard-to-reach populations about health status; help community groups develop action plans; test promising and innovative change strategies that may be adopted by community organizations; and serve as a forum to connect people with diverse talents, ideas, and capacities (Butterfoss, 2006).

Intersectoral collaboration focuses more on the organizational and coalition level, whereas participation focuses mostly on the community level. By participating and collaborating, stakeholders, both community members and professionals, take part in a learning process, develop skills and competences, and gain power to take decisions that affect their lives.

6.6 Variables of participation and collaboration

The 29 papers found in our initial and additional literature research were critically scrutinized for success factors for participation, collaboration, and partnerships. On the basis of our findings from this examination, we compiled a list of variables which contribute to the facilitation and evaluation of social environments for health (Butterfoss et al.,1996; Buttterfoss, 2006; Cashman et al., 2003; Cramer et al., 2006; Drach-Zahavy and Baron-Epel, 2006; Fawcett et al., 2000; Florin et al., 2000; Foster-Fishman et al., 2001; Freudenberg, 2004; Granner and Sharpe, 2004; Hays et al., 2000; Israel et al., 1998; Kegler et al., 1998; Koelen et al., 2008; Kreuter et al., 2000; Laverack and Wallerstein, 2001; Naylor et al., 2002; Rifkin et al., 1988; Roussos and Fawcett, 2000; Schulz et al., 2003; Sicotte et al., 2002; Sogoric et al., 2005; South et al., 2005; Wallerstein, 2000; Wolf, 2001; Zakocs and Edwards, 2006). From some papers, only the relevant domains (those on participation or collaboration) were included: participation by the local community (Onyx and Bullen, 2000) and participation as a domain of community capacity (Goodman et al.,

1998; Maclellan-Wright et al., 2007). The different authors use many different terms to indicate more or less the same issues and so these terms are amalgamated. For example, communication entails internal and external communication, exchange of information, openness and dialogue, and problem solving and conflict resolution.

The variables are presented in the middle column of Figure 6.2. We clustered the variables under 5 categories (context, participants or stakeholders, partnership or coalition, processes and outcomes). The idea is that from each of the categories a couple of variables can be selected. In this way, the framework serves as a menu: for evaluation purposes a set of variables representing different categories can be composed. The variables still remain to be operationalized by indicating what has to be measured: for example 'availability', 'level', 'quality', 'comprehensiveness' etc. For example, the action plan can be measured when 'quality of action plan' is used. Quality of action plan can be measured qualitatively by judging whether it covers relevant issues or by asking stakeholders to offer their opinion, and quantitatively by asking stakeholders to score the quality of the action plan in terms of a number on a scale. In the right column of Figure 6.2 we provide some possible operationalizations of variables. It should be noted that both quantitative and qualitative operationalizations are needed. For example number of participants can be counted easily. However, do all those present participate fully? To answer such questions, a closer look into perceptions and opinions of stakeholders is often necessary, and this means looking for qualitative data.

The variables found for participation and collaboration are applicable on a continuum of four levels: 1) individual, 2) organizational, 3) coalition, and 4) community (Figure 6.2, left column). This categorization partly matches categorizations of other authors (e.g. Granner and Sharpe, 2004). Characteristics, perceptions, and processes of individuals, organizations, coalitions, and communities, and the way in which they function will depend on local and national structures and on the context and their goal. The categorization into levels is arbitrary as many variables are shared, and variables interact among each other. In effective social learning processes, distinctions between the levels will be small or even absent sometimes. For the same reason, it is also not possible to draw lines between the variables and levels. Some variables apply for all levels, for example participation, whereas others only to one or two, for example fund raising.

6.7 Guidelines for facilitation and evaluation

In the framework, participation and collaboration are used as mediators to connect social environments and to bring about social change processes in health promotion. To use the framework to evaluate and facilitate change in the social environment for health, we formulated four guidelines. The guidelines are based on our experiences in Dutch health promotion programs in which community participation and intersectoral collaboration were main principles (Koelen, 2000; Koelen et al., 2001; Saan et al., 2007; Vaandrager, 1995; Wagemakers et al., 2007a; Wagemakers et al., 2008).

The framework serves as a summary of options available. It can be used as a 'menu of menus' by choosing levels from the left column, variables from the second and measures from the third. The guidelines that help to use the framework are 1) a

Menu 1: Levels	Menu 2: Variables	Examples of operationalizations
Individual level Characteristics, perceptions and processes. **Organizational level** Characteristics, perceptions and processes. **Coalition level** Characteristics, perceptions and processes. **Community level** Characteristics, perceptions and processes.	**Context** • Community context and readiness • Linkages to other groups • Fund raising, resource mobilization • Resources, (technical/political) support and assistance	• Number and quality of collaboration structures • Amount of funding • Availability of resources
	Participants/stakeholders • Expectation, competences, skills, knowledge, expertise, experience • Diversity of participants, voluntary, paid or consultant, recruitment, drop out, work history, represented organizations • Trust, mutual dependency, power relations/equity, respect	• Experience: number of years worked on issue • Number of partners recruited and dropped out (in the last year) • Number of participants (formal and informal) • Partners work together in a constructive manner
	Partnership/coalition • Role, task, responsibility • Structure, leadership, management • Communication (internal-external), information exchange, openness, dialogue • Evaluation, documentation, visibility, feedback, reflection, flexibility	• Level of agreement on roles • Number of tasks of participants • Number of participants attending meetings or attendance rate • Quality of communication • Comprehensiveness of evaluation
	Processes • Involvement, ownership, commitment, motivation, task-focus • Mission, vision, aims, action plan • Problem solving, decision-making • Participation satisfaction	• Satisfaction with contribution of partners • Scores on quality of action plan • Level of agreement on mission • Opinion about participation • Level of participation
	Outcomes • Satisfaction, perceived effectiveness, benefits and costs • Participation result • Reached target population • Image/public profile, media coverage • Visible outcomes, (type of) activities, change in (physical) environment, institutionalization, policies	• Number of organized activities or services • Number of participants per activity • The intensity of use of facilities and services • The number of resolved problems or the percentage to which they are solved

Figure 6.2 Menu of levels and variables of participation and collaboration.

flexible approach (a menu), 2) a clear focus (specific aims), 3) use of methodologies that facilitate and evaluate (action research), and 4) maximal validity of results (triangulation). The first two guidelines are – as far as we know – new contributions. The other two have been mentioned elsewhere as well.

Use the variables as a menu

At present, we advise using the framework as a menu for research and practice: the variables that are opportune for the specific situation and context can be selected and used in combination in methods and tools. This may be in new tools, but also in existing ones, like for example tools that make use of spiderwebs for the visual presentation of community participation (Naylor et al., 2002; Rifkin et al., 1988), community involvement (South et al., 2005), and community empowerment (Laverack and Wallerstein, 2001). To be able to discern changes, it is recommended to use the same variables at different times in the same way.

Set specific aims for social change processes

In interventions that aim to achieve social change processes, such aims should be separately formulated, in addition to the usually used aims of health predicting outcomes and health results. For example, setting participation as an aim requires stakeholders to achieve, sustain and monitor participation. The participation process (e.g. level, satisfaction, number of participants) should be monitored as a separate process or outcome (e.g. Fawcett et al., 2003). The framework is intended for assessment of participation and collaboration, direct and long-term outcomes, and for initiating and sustaining learning processes. If the aim is to measure specific issues such as the state of the art of, for example, community capacity (Maclellan-Wright et al., 2007), we recommend using such validated instruments as well.

Use an action research approach

The framework can be used in research in which the researcher as an outsider gathers and interprets data. The advantage here is the reliability of the data, the degree to which measurement is repeatable, but a disadvantage is that observed changes and results are not instantly used as input for new actions and learning processes. Action research does that (see also Trondsen and Sandaunet, 2009) and, because action research directly contributes to the intervention by enabling action and learning processes by continuous assessment and feedback, we recommend an action research approach as an integrated stream in the intervention process.

Action research, a systematic inquiry with the collaboration of those affected by the issue being studied, for purposes of education and taking action or effecting change, is considered to be an appropriate methodology in health promotion (e.g. Butterfoss, 2006; Green and Mercer, 2001; Koelen et al., 2001; Minkler and Wallerstein, 2008; Roussos and Fawcett, 2000; Schulz et al., 2003; Wallerstein et al., 2002) because it reflects the principles and ethics of community health promotion, recognizes the

complexity of community health promotion, and facilitates the development of capacities, learning, and empowerment (Rice and Franceschini, 2007). Action research enables the use of multiple methods and multiple sources, thus addressing different levels in different ways.

Triangulate data

We also recommend the triangulation of data by using a mix of methods, tools, and information sources, and different researchers, as all this improves data validity (e.g. Ebbesen et al., 2004; Koelen et al., 2001; Nutbeam, 1998b; Roussos and Fawcett, 2000; Schulz et al., 2003). In combining qualitative and quantitative data, the strengths of both strategies are used: the flexibility and consequent ability to obtain an in-depth comprehension and interpretation from the qualitative approach, and from the quantitative approach, the solidity and the ability to quantify (Campostrini, 2007; El Ansari et al., 2001; Glasgow and Emmons, 2007). Qualitative methodologies, such as focus groups, in-depth interviews, and observation, allow for a deeper understanding of the reasons why people are participating and collaborating, or not, and thus give insight into the processes leading to the outcomes. Quantitative methodologies enable us to see the magnitude of things. We suggest using (aggregate) individual level data and observational data on the social system.

Cross-checking research findings of both kinds with involved stakeholders contributes to the strength of the conclusions or validity of the data and supports the engagement of stakeholders (Koelen et al., 2008). Engaging stakeholders will improve the external validity of research, that is, its applicability and usability in the settings in which the research occurs (Green and Mercer, 2001). So, research in itself can act as a participation fostering intervention.

6.8 Lessons learned

The added value of our framework and guidelines to facilitate and evaluate social change in health lies in meeting requirements of both practice and science by combining flexible approaches (e.g. a menu, action research, multiple methods, and resources) and scientific accountability (e.g. specific aims, external validity). The guidelines are rooted in our experiences, but do have a lot in common with existing guidelines as well, e.g. "A Framework for the Process of Participatory Evaluation in Community Initiatives" (Fawcett et al., 2003), "The Participatory Evaluation Model for Coalitions" (Wallerstein et al., 2002) and PAHO's "Participatory Evaluation Initiative" (Rice and Franceschini, 2007). However, our framework does have added value. Participation and collaboration provide means and measures to address the multifacetedness and dynamic nature of changing social environments for health, its different levels and the perspectives and experiences of a variety of stakeholders. Participation and collaboration subsume many environmental concepts and thus address the multifacetedness of the social environment in a quite simple way. Participation and collaboration set in motion changes at multiple levels (individual, organizational, coalition, and community),

and participation and collaboration can be both a process and an outcome measure in the social environment of health. We use participation and collaboration, both core concepts in health promotion, as entry points or moderators to make the social environment manageable and researchable, as this helps to reveal the actual dynamics of health promotion practice, thus unraveling the ongoing processes and facilitating learning processes. The listing of the variables of participation and collaboration as a menu of menu's is – as far as we know – unique, and often not much attention is paid to setting specific aims for social change processes. The choice of which variables to measure should be dictated by the specific aims for social change and be monitored and evaluated by an action research approach and by triangulation of data. Using the framework in this way enables scientists and practitioners to cope with the challenges of evaluating change in the social environment of health.

In essence, the framework, as a starting point for the development of tools and methods, calls for broadening the focus by using quantitative data and qualitative data, outcome and process data (El Ansari et al., 2001; Metzler et al., 2007) and by addressing both biomedical topics (such as physical activity) and broader (social) issues (Raphael et al., 2008).

The framework can be used as an evaluation method on its own but also as part of broader monitoring and evaluation programs or logic models (e.g. Fawcet et al., 2003; Fielden et al., 2007; Kaplan and Garret, 2005). The framework invites evaluation by means of an action research approach, although we agree with MacDonald and Mullet (2008) that no one method or approach is appropriate in all circumstances. Also, we realize that the guidelines may be applicable to the broader field of health promotion.

On our route to develop the framework and guidelines, we had to cope with challenges such as how to deal with concepts, the choice of moderators, and validation issues.

First, the concepts used to indicate the social environment and its variables are very diverse. Terms used in the literature are evolving concepts, intangible, and more often than not have multiple possible interpretations (see also Ebbesen et al., 2004). For example, 'social' may be used to refer to society, e.g. the system of common life, or may be used as a contrast to individual (Krieger, 2001). Also, variables are often used in more than one of the many concepts of the social environment. Participation is part of, and closely linked with, empowerment (Butterfoss, 2006; Laverack and Wallerstein, 2001; MacDonald and Mullet, 2008; Zimmerman and Rappaport, 1988), with social capital (Onyx and Bullen, 2000), and with community capacity (Goodman et al., 1998). This reveals also the limitations of evaluations that aim to measure one concept. Taking participation and collaboration as entry points means that more than one concept of the social environment is measured at the same time and also that the preference of stakeholders for 'community-friendly' terms is met (Wallerstein et al., 2002).

Second, we had to limit ourselves and selected the concepts that are amenable to change at the community level. We realize that participation and collaboration may not be the only moderators influencing the relationship between the social environment and health, but on the basis of our experience – supported by the literature – we advocate their use as long as there are no better alternatives.

Third, we focused on developing a framework grounded in both practice and theory by combining experiences from Dutch case studies with results from the literature review. The framework is intended for use in different contexts and populations. Therefore the focus was on what practice needs: contextual and external validity (Glasgow and Emmons, 2007). We do not yet have data about the construct validity of our framework: it is not as yet tested whether the listed variables adequately measure all aspects of participation and collaboration.

Of course, a lot is already known about how variables relate to other variables and to the effectiveness of collaboration. Community leadership and shared decision making are linked to member satisfaction and participation in coalitions (Butterfoss et al., 1996); structural characteristics of coalitions explain over a quarter to over a third of the variance in coalition effectiveness (Hays et al., 2000); a more fluid and permeable structure contributes more to the effectiveness of a collaboration than a tightly bounded, well-defined stable structure (Drach-Zahavy and Baron-Epel, 2006); formalization of rules/procedures, leadership style, member participation, membership diversity, agency collaboration, and group cohesion are associated with coalition effectiveness (Zakocs and Edwards, 2006); coalitions with more staff time, good communication, greater cohesion, and more complex structures have higher levels of implementation (Kegler et al., 1998); and quality of plans depends on number of hours worked by paid coordinators and number of members attending meetings (Florin et al., 2000).

In sum, the listed variables in Figure 6.2 help to fulfill the needs of practice when used as proposed by the guidelines. Critics may object to our supermarket approach in the self-selection of the variables. We expect that an increased use of the framework will help us to identify which are the main variables and which are only of secondary value. To find out whether this do-it-yourself toolkit works, whether participation and collaboration moderate to bring about changes in the social environment and whether it is relevant and applicable in practice, methods and tools should be further developed and applied systematically in more case studies. Results of case studies or practice-based evidence will contribute to external validity and the iterative theory building in health promotion and eventually lead to evidence-based best practices (see also Green and Glasgow, 2006).

Of course, the list and guidelines in themselves are not enough to change and evaluate the social environment of health, but we hope that we have provided researchers and practitioners with common ground that is more adequate in facilitating and evaluating the creation of supportive social environments in community health promotion.

Acknowledgements

This article is partly based on data gathered within the pilot project Health Promotion Frame of Reference, carried out in 2007 and coordinated by the Netherlands Institute for Health Promotion (NIGZ) and funded by the Netherlands Organization for Health Research and Development (ZonMw).

7

Coordinated action checklist: A tool for partnerships to facilitate and evaluate community health promotion

Annemarie Wagemakers
Maria A Koelen
Jeanette Lezwijn
Lenneke Vaandrager

Accepted *Global Health Promotion*, 2010

Abstract

Coordinated action through partnerships is a core approach in community health promotion to deal with the multidimensionality of today's health and societal issues. The number of partnerships is increasing. However, facilitation and evaluation of partnerships is hampered by the lack and/or non-use of feasible tools. As a consequence, health promotion through partnerships is not optimally facilitated and evaluated. This article describes the development and piloting of a tool and guidelines to facilitate and evaluate coordinated action in community health promotion.

The initial development of the tool was based on relevant literature, a conceptual framework to support social environments for health, and an inventory of existing tools. Appreciative inquiry principles contributed to the formulation of items. The result, a checklist for coordinated action, was further developed and assessed for usability in six different partnerships: a national program, an academic collaborative and four local partnerships. Results of the checklist were cross-checked and discussed with partners. Piloting the checklist resulted in a feasible tool helpful to partnerships because of its ability to generate actionable knowledge.

The checklist enables the facilitation and evaluation of community health promotion partnerships that differ in context and level (both local and national), phase of the program and topics addressed. Cross-checking and discussing results with partners and triangulation with interview data increases the reliability of the results of the checklist. Piloting in multiple cases contributes to the checklist's external validity.

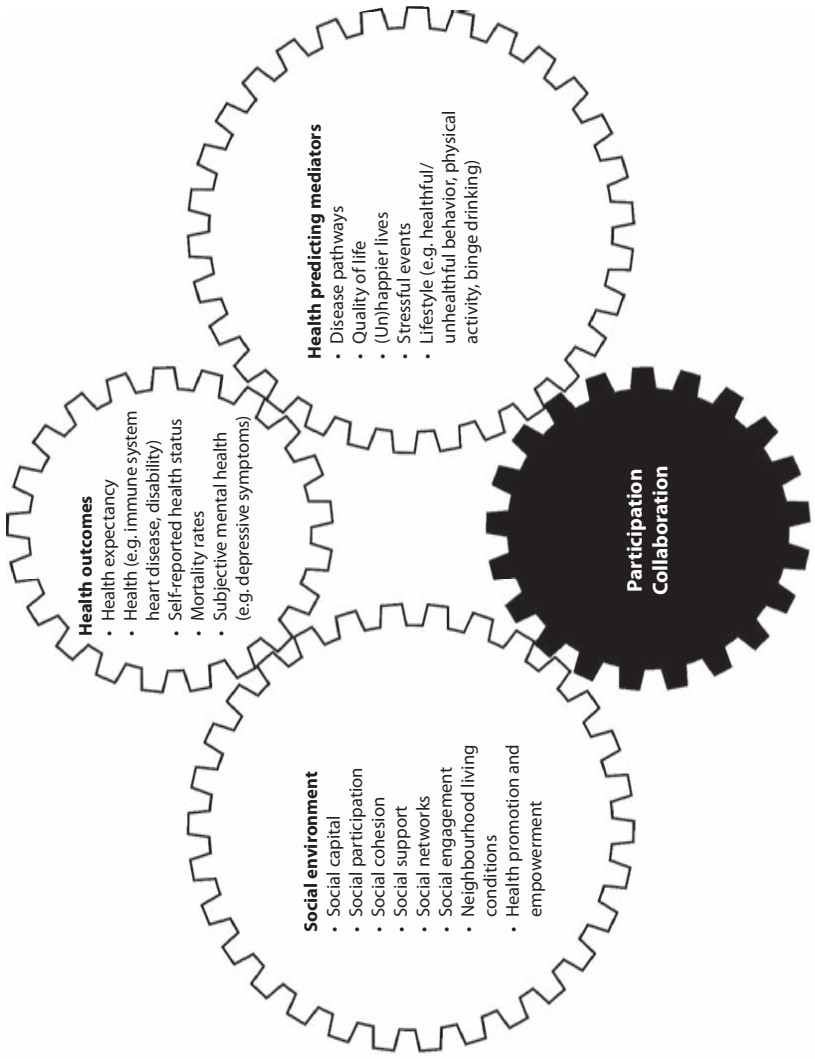
7.1 Introduction

In today's health promotion the added value of coordinated action for health is generally acknowledged. In coordinated action, organizations of two or more different sectors work jointly to achieve an outcome (Koelen et al., 2008). Coordinated action brings about changes in the environment of health and thereby improves the health of individuals and populations and increases awareness of health consequences involved in policy decisions and organizational practice, within and among different sectors. Central to coordinated action are partnerships for intersectoral collaboration and community participation (WHO, 1986; WHO, 2005). The number of partnerships is increasing rapidly because no agency alone has the resources to address the wide range of determinants of today's multifaceted public health problems (Green et al., 2001; Goldman and Schmalz, 2008) such as overweight and obesity, the rapid ageing of the population and the greater longevity of people with chronic conditions.

A review of collaborative partnerships found that partnerships convincingly contribute to supportive social environments of health (Roussos and Fawcett, 2000). However, evaluation of partnerships is hampered by lack of information on how interventions bring about change in the social environment in favour of health (Anderson et al., 2003; Metzler et al., 2007). A lot more happens through partnerships than is measured, evaluated and reported. There seems to be a gap in knowledge on how to effectively facilitate and evaluate coordinated action for health (Metzler et al., 2007), and little is known about appropriate strategies to evaluate partnerships (Bowen and Martens, 2006). One of the reasons for this gap is the lack and/or non-use of feasible tools in practice (Roussos and Fawcett, 2000; Granner and Sharpe, 2004; South et al., 2005) due to unfamiliarity with existing tools and guidelines. Science advocates the use of validated tools, and practice longs for tools that fit the multifacetedness of health promotion practice. This means that tools and methods need to be scientifically grounded, easy to adapt to specific needs in practice, easy to analyse, and relatively low in time demand and cost (Wagemakers et al., 2008).

In previous research (Wagemakers et al., in press) a framework and guidelines to facilitate and evaluate supportive environments for health has been developed (see Figure 7.1). The framework is based on our experiences in case studies and a review of the literature on participation and collaboration. The framework visualizes the relation between the social environment, health predicting mediators (e.g. lifestyle) and population health outcomes (e.g. health status) and provides operationalizable variables that moderate the relation between the social environment and health predicting mediators. In the framework, participation and collaboration, both core concepts in health promotion (WHO, 1986; WHO, 2005), are used as entry points to make the social environment of health researchable and manageable by partnerships and communities. Participation and collaboration have been operationalized into variables (middle column).

The reason for choosing participation and collaboration as moderators is that they have an intermediairy role in health and social change outcomes (Butterfoss, 2006; Rütten et al., 2008) and are central to the effectiveness of health promotion (Israel et al.,


Health predicting mediators
• Disease pathways
• Quality of life
• (Un)happier lives
• Stressful events
• Lifestyle (e.g. healthful/ unhealthful behavior, physical activity, binge drinking)
Health outcomes
• Health expectancy
• Health (e.g. immune system heart disease, disability)
• Self-reported health status
• Mortality rates
• Subjective mental health (e.g. depressive symptoms)
Social environment
• Social capital
• Social participation
• Social cohesion
• Social support
• Social networks
• Social engagement
• Neighbourhood living conditions
• Health promotion and empowerment
Participation
Collaboration

Menu 1: Levels	Menu 2: Variables	Examples of operationalizations
Individual level Characteristics, perceptions and processes. **Organizational level** Characteristics, perceptions and processes. **Coalition level** Characteristics, perceptions and processes. **Community level** Characteristics, perceptions and processes.	**Context** • Community context and readiness • Linkages to other groups • Fund raising, resource mobilization • Resources, (technical/political) support and assistance	• Number and quality of collaboration structures • Amount of funding • Availability of resources
	Participants/stakeholders • Expectation, competences, skills, knowledge, expertise, experience • Diversity of participants, voluntary, paid or consultant, recruitment, drop out, work history, represented organizations • Trust, mutual dependency, power relations/equity, respect	• Experience: number of years worked on issue • Number of partners recruited and dropped out (in the last year) • Number of participants (formal and informal) • Partners work together in a constructive manner
	Partnership/coalition • Role, task, responsibility • Structure, leadership, management • Communication (internal-external), information exchange, openness, dialogue • Evaluation, documentation, visibility, feedback, reflection, flexibility	• Level of agreement on roles • Number of tasks of participants • Number of participants attending meetings or attendance rate • Quality of communication • Comprehensiveness of evaluation
	Processes • Involvement, ownership, commitment, motivation, task-focus • Mission, vision, aims, action plan • Problem solving, decision-making • Participation satisfaction	• Satisfaction with contribution of partners • Scores on quality of action plan • Level of agreement on mission • Opinion about participation • Level of participation
	Outcomes • Satisfaction, perceived effectiveness, benefits and costs • Participation result • Reached target population • Image/public profile, media coverage • Visible outcomes, (type of) activities, change in (physical) environment, institutionalization, policies	• Number of organized activities or services • Number of participants per activity • The intensity of use of facilities and services • The number of resolved problems or the percentage to which they are solved

Figure 7.1 A framework to facilitate and evaluate supportive social environments.

1998; Wallerstein, 2006). Also, case studies show that (community) participation and (intersectoral) collaboration are measurable (Wagemakers et al., 2008; Andersson et al., 2005; Wagemakers et al., 2007a). The left column shows that the variables are applicable on an interrelated continuum of four levels: individual, organizational, coalition and community. The right column provides some possible operationalizations of variables. The framework serves as a summary of options available to facilitate and evaluate changes in the social environment for health. It can be used as a 'menu of menus' by choosing levels, variables and operationalizations (Wagemakers et al., in press). Based on this framework, a checklist for coordinated action has been developed.

The aim of this paper is to 1) report on the development and piloting of a checklist for coordinated action, 2) assess its ability to generate actionable knowledge to the mutual benefit of partners and partnership work, and 3) assess its usability. The checklist is piloted by a multiple case strategy, that is, by implementing the checklist in different settings. Multiple case studies provide a basis for external validity, which means that the checklist is relevant to other situations. Internal validity is increased by the use of verification techniques such as data triangulation and checking results of the checklist with partners (Koelen et al., 2008; Cohen and Crabtree, 2008).

First, the rationale and methodology for the development and piloting of a checklist for coordinated action is explained. Second, in the results section, the scores and actions generated in the pilots and the usability of the checklist is evaluated. Third, strengths and limitations of the checklist, its accompanying methods and its output – actionable knowledge – are addressed.

7.2 Method

The rationale for developing a checklist for coordinated action derives from both the literature and the practical experiences of community health promotion. The route towards the development of the checklist consisted of two steps: setting criteria for the checklist and piloting the checklist in practice. In piloting the checklist we used an action research approach.

Criteria for the checklist

Three criteria were considered in the development of the checklist.

First, an important success factor in coordinated action is visibility because it is an incentive for involvement and action (Koelen et al., 2008). Therefore a tool needs to visualize results, for example by scores (Pretty, 1995; Verbeke et al., 2004) or spiderwebs (South et al., 2005; Rifkin et al., 1988).

Second, a tool needs to faciliate and support communication. Communication, including feedback, cross-checking and discussing results with partners, promotes trust (Bowen and Martens, 2006), increases satisfaction with evaluation and consequently increases participation (Naylor et al., 2002; Wagemakers et al., 2007a), contributes to the evolvement of the partnership (Green et al., 2001), facilitates subsequent action (Koelen et al., 2001) and contributes to the validity of results (Butterfoss, 2006; Koelen et al., 2001).

Third, a tool must be usable in all phases. To achieve and sustain coordinated action (Koelen et al., 2008; Goldman and Schmalz, 2008) partnerships need to be nurtured in all phases, e.g. initial mobilization, planning, implementation and evaluation (Florin et al., 1993).

Several tools that measure participation and collaboration were assessed. The tool that best fits the criteria is that developed by Verbeke et al. (2004). An asset of the Verbeke tool is that it addresses four well-organized dimensions: task, relation, growth and visibility. The task dimension relates to concrete products and results such as the action plan. The relation dimension concerns interaction among the participants and can be compared to Sicotte et al.'s (2002) intra-group processes and Schulz et al.'s (2003) dimensions of group dynamics. The growth dimension relates to the achievement and evolution of the partnership and is closely related to the visibility dimension that includes items on perceived image. On the basis of Verbeke's tool, a checklist was developed that reflects the previously mentioned criteria.

Developing and piloting the checklist

We used an action research approach to compose and pilot the checklist in close collaboration with six partnerships: a national program of the National Institute of Sport and Physical Activity (NISB), an academic collaborative (AGORA) and four local partnerships in three cities and one town in the Netherlands: Eindhoven, Zwolle, Delft and Epe. Table 7.1 provides an overview of the partnerships.

The partnerships were convenient samples stemming from the authors' contacts with practice. In three partnerships, one or more authors were part of the partnership (B, C, F). In the other three partnerships (A, D, E), the first author guided the use of the checklist.

In line with our guidelines (Wagemakers et al., in press) items were chosen that can be considered as operationalizations of the variables in our framework (Figure 7.1). The chosen items were opportune for the specific situation and contexts of the partnerships. Some items cover more than one variable and vice versa. The checklist addresses all levels of partnership work, from the individual level to the community level. Therefore, some items are formulated in the 'I-form' whereas others address partners or the partnership.

To contribute to visibility, the checklist items convert the opinions of partners into quantitative variables by asking them to score the items on a likert-like scale. The five answer categories are: no (score 0), probably not (score 25), no/yes (score 50), probably yes (score 75) and yes (score 100). The mean of items is calculated by adding the scores and dividing the result by the total number of partners. Dimensions are rated by adding the item scores and dividing the result by the number of items.

To facilitate and support communication, the *appreciative inquiry* principles (Cooperrider et al., 2005) were applied in composing the checklist. Appreciative inquiry is an approach that inspires and stimulates partners by appreciating the value of what already exists and using this as a starting point for envisioning, dialoguing on and innovating desired changes. Appreciative inquiry has already been used successfully

Table 7.1 Overview of partnerships, characteristics and use of checklist

Partnership	A	B	C	D	E	F
	Project group *Heart for Lakerlopen*	Academic collaborative steering group	Pilot program *Overweight in the Neighbourhood*	Workgroup *Healthy and Affordable Food*	Workgroup *Vitality* Pilot of NISB	Project group *Healthy Ageing* Part of AGORA
	Eindhoven	AGORA	NISB	Zwolle	Delft	Epe
Features	One of six neighborhoods in community program in Eindhoven, a big city in the southern part of the Netherlands, started in 2000	Collaboration between practice and science in Gelre-IJssel Region, the Netherlands, set up in 2006	National program of the Netherlands Institute for Sport and Physical Activity (NISB), set up in 2007	Workgroup, part of program *Healthy Together*, in Zwolle, a city in the rural north-east of the Netherlands, started in 2008	Workgroup to set up integrated care facilities in two neighborhoods in Delft, a city in the western part of the Netherlands, started in 2007	Program to promote healthy ageing in a rural town in the eastern part of the Netherlands, started in 2007.
Theme	Healthy behaviour	Healthy ageing	Overweight	Nutrition	Overweight	Loneliness
Target group	Inhabitants	Elderly	Inhabitants	Low SES women	Low SES children	Elderly
Main partners	Municipal Health Service, Local grassroot organisations, welfare work	Municipal Health Service, Wageningen University, Municipalities	Municipalities, Municipal health services and sport services	Municipal Health Service, Local grassroot organisations	Municipal Health Service, Municipality, Schools, Sport services	Municipal Health Service, Welfare Organisation, Municipality, Mental Health Care
Use checklist	January 2007 in meeting	1. April 2007 Individually (comined with interview) and discussed in a meeting 2. May 2009 in meeting	1. June 2008 in meeting 2. September 2009 in meeting	December 2008 Individually comined with interview) and discussed in a meeting	December 2008 Individually	January 2009 in meeting

in health promotion (Melander et al., 2006; Reed et al., 2008) and as an interview tool (Michael, 2005). Applying the principles means that items and questions are formulated in a positive way. An example of an item on the checklist is 'The partnership is an asset to health promotion'.

The checklist has been applied in succession, that is, in one partnership after the other. After each application, the checklist itself was evaluated by the partnership, its coordinators and the authors. Results of the evaluation were used to improve the checklist for use in the next partnership. The first checklist was composed of 20 items. The inclusion and exclusion of items resulted in a core checklist of 25 items. In the fourth pilot, the partnership indicated that an item on continuation after the project period was lacking. As a consequence, the last item of the checklist was included. Depending on the situation and specific wishes of the partnerships, more items may be included.

In all six partnerships, the checklist was used to facilitate and evaluate the partnership and its actions. In AGORA and NISB, the checklist has been used twice, respectively with a time-elapse of two years and one year. In both partnerships, reasons to use the checklist again were that evaluation of the partnership was requested by the funding agency, the first positive experience with the checklist and that former results gained by the checklist could be compared with new results. In AGORA (2007) and Zwolle, the checklist was filled in as part of an individual interview. The results, of both the interviews and the checklist, were fedback and discussed in a meeting. In Eindhoven, AGORA (2009), NISB (2008 and 2009) and Epe, the checklist was individually filled in during a meeting and discussed right away. In Delft, partners filled in the checklist individually at their office and the checklist was not discussed. Filling in took a few minutes. The checklist functioned as a discussion opener by asking partners on which items they scored high (and low) and why. In the discussions again the principles of appreciative inquiry were applied.

7.3 Results

Scores and actions

Table 7.2 presents the mean scores of the pilots on the core checklist of 25 items.

Discussion centred on establishing the reasons behind the scores, both the high scores (successes) and low scores (points to improve). Feedback and discussion enabled clarification of the reasons for high and low scores and, following from that, action could be taken (see Table 7.3).

All the partnerships view themselves as an asset to health promotion. In particular, the suitability of partners, based on expertise and involvement, is highly appreciated.

In Eindhoven, the score on the item 'The contribution of the different partners is to everyone's full satisfaction' was relatively low. The discussion revealed that the score was low because the number of activities for inhabitants was far less than initially planned.

Table 7.2 The checklist for coordinated action and calculated mean scores of the partnerships

Partnership Items and scores (means 0–100)		A N=7	B1 N=14	B2 N=12	C1 N=14	C2 N=13	D N=7	E N=8	F N=5
General		**100**	**93**	**90**	**88**	**88**	**96**	**97**	**85**
1	The partnership is an asset (to health promotion).	100	93	90	88	88	96	97	85
Suitability of the partners		**77**	**83**	**85**	**76**	**79**	**88**	**80**	**71**
2	To attain the goals of the partnership, the right partners are involved.	75	80	68	70	69	79	78	60
3	Equity of the partners is essential for good collaboration.	82	79	98	75	81	89	84	85
4	The contribution of the different partners is to everyone's full satisfaction.	61	73	65	70	71	86	72	65
5	I have a special interest in participating in the partnership because of my position or organization.	90	82	94	84	88	93	75	85
6	I am able to contribute to the partnership in a satisfactory way (time, means, etc.).	75	88	83	75	71	86	69	55
7	I feel involved in the partnership.	79	93	94	84	88	93	91	75
8	I can contribute constructively to the partnership because of my expertise.	79	89	90	75	85	93	91	75
Task dimension		**78**	**59**	**76**	**63**	**76**	**87**	**70**	**74**
9	There is agreement on the mission, the goal and the planning within the partnership.	71	45	63	63	73	82	72	75
10	The partnership achieves regular (small) successes.	89	63	100	60	81	89	75	65
11	The partnership functions well (working structure, working methods).	75	59	61	69	71	86	59	75
12	The partnership evaluates progress at regular intervals and makes adjustments if necessary.	*	70	79	58	77	89	72	80

Relation dimension		**84**	**59**	**69**	**66**	**70**	**91**	**67**	**71**
13	The partnership partners communicate in an open manner.	*	61	60	80	77	89	56	75
14	The partnership partners work together in a constructive manner and know how to involve each other when action is needed.	86	61	73	59	63	96	69	75
15	The partnership partners are willing to compromise.	*	50	70	71	69	89	75	80
16	In the partnership conflicts are dealt with in a constructive way.	*	50	60	56	62	**	66	60
17	The partnership partners will carry out decisions and actions loyally.	82	75	83	66	77	89	69	65
Growth dimension		**72**	**71**	**82**	**72**	**77**	**71**	**73**	**70**
18	I create goodwill and involvement for the partnership within my organization.	82	86	90	80	85	92	75	80
19	Giving feedback to the local officials on behalf of the partnership is satisfactory.	58	58	75	59	63	19	72	55
20	The partnership is willing to recruit new partners in the course of time.	79	79	81	79	73	89	88	80
21	The partnership succeeds in mobilizing others for actions.	68	59	82	69	85	82	75	65
Visibility dimension		**82**	**69**	**78**	**66**	**57**	**77**	**63**	**60**
22	The partnership maintains the external relationships in an accurate way.	*	58	65	64	77	89	66	60
23	The partnership is seen as reliable and legitimate by external relations.	*	71	86	71	44	69	59	55
24	The image of my partnership in the outside world is good.	82	79	84	63	54	75	57	55
25	The partnership takes care of continuation after the project period.	*	*	77	*	54	75	69	70
Mean score of all items		**78**	**71**	**79**	**70**	**73**	**84**	**73**	**70**

The numbers are the mean scores of individual partners on a likert-like scale; no (score 0), probably not (score 25), no/yes (score 50), probably yes (score 75) and yes (score 100). * = Item was not included in this case. ** = Item could not be answered because no conflict had occurred.

Table 7.3 Actionable knowledge generated by the checklist and follow-up

Partnership	A Eindhoven	B1 AGORA	B2 AGORA	C1 NISB	C2 NISB	D Zwolle	E Delft	F Epe
Successes	Partners are loyal and the image of the partnership is good.	Partners are suitable, have the right expertise and feel involved.	Involvement of partners and (small) successes achieved.	Right partners are represented and partners feel involved.	Partners work together in a constructive way and successes achieved.	Partnership calls itself a 'dream team' and role of project coordinator is central.	Not discussed.	Partners' expertise is used well and communication is open.
Points to be improved	Participation of inhabitants is low.	Partners have different visions on mission and goal.	Limited communication between partners. Knowledge dissemination to municipalities is weak.	Partners lack opportunities to exchange experiences.	The image and visibility needs to be improved. Activities to continue collaboration need to be set up.	Embedding of partnership in local structures is lacking.	Not discussed.	Involvement of other organisations and the elderly is low.
Follow-up	Developing an action plan to involve inhabitants.	Discussion sessions to clarify roles.	Structures for communication and knowledge exchange. Alderman in steering group.	Special meetings (e.g. work visits), newsletter and e-mail contact.	Articles based on the results of the pilot will be published. In new NISB programs, the partners will be involved.	More attention to growth and visibility dimension of partnership.	Partnership was split into smaller groups on specific activities.	Meetings with organisations (e.g. municipality, church) and the elderly.

This is an example of a qualitative operationalization by the partners. After discussion, it was agreed that an action plan would be developed to set up activities for inhabitants.

In AGORA (in 2007), the results of the individual interviews and the score on the item 'There is agreement on the mission, the goal and the planning within the partnership' revealed that partners held different views on the mission and goals of the healthy ageing program. Cross-check of those results with partners further clarified that the views on mission and goals ranged from (only) health education to a broad range of facilities and services that contribute to health and well-being, like for example transport. Discussion sessions that followed contributed to improved mutual understanding and respect for different visions and disciplines. Two years later, discussing high and low scores on the checklist revealed that many (small) successes had been recorded. The partners agreed that these successes needed to be celebrated as well, and this was done right away. The discussion also revealed that continual attention must be paid to communication. Moreover, it was considered important to involve more municipalities. As a result, it was decided to add an alderman to the steering group. In other partnerships, effected changes included agreement to expand the number of meetings for the partners to exchange experiences (NISB in 2008), the plan to initiate actions to embed the project (Zwolle), and efforts to strengthen involvement of organizations and the elderly (Epe). In Delft, the results of the checklist were not discussed with partners. On the basis of the Delft scores the project coordinator decided to split the partnership into smaller groups in order to increase efficiency. In NISB (in 2009) the checklist was used during the last meeting of the partnership and follow-up focused on publicity of results and development of future activities.

Usability of the checklist

Overall feedback from partnerships about the usability of the checklist was positive: items were understandable, the checklist could be filled in quickly, counting scores was simple, adaptations could be made easily and especially discussing results with partners generated actionable knowledge. According to the partners, the 'I-formulated' questions were easier to answer than items addressing all partners or the partnership. The scores on the checklist were a good starting point for discussion. In general, highly rated items were acknowledged as non-problematic or as successes. The lower rated items were of most interest for discussion because they unraveled differences between partners and points to improve. Overall, use of the checklist and the accompanying methods (feedback and discussion) was found to be complementary to day-to-day partnership work, contributing to team building and enabling partners to sustain coordinated action. In addition, partnerships used the results for external evaluation purposes, such as in progress reports required by funding agencies.

7.4 Discussion

Checklist

Items on the checklist often address more than one variable of participation and collaboration. They can also be applicable for different levels (individual, organizational, coalition and community), and to a broad range of dimensions (task, relation, growth, visibility) of partnership work. This can be a limitation because only a few items can be included in each dimension. Moreover, items can be, and in our pilots were, interpreted differently by partners. Both limitations however can be assets as well. The strength of the checklist is not the number of items but the inclusion of the 'right' items: items that initiate discussion, which in turn generates actionable knowledge at all levels and on all dimensions. In our pilots it appeared that discussion about the meaning of items between the partners helped to reveal the actual dynamics of the partnership and to unravel ongoing processes. A significant element of the checklist is the scoring system because it visualizes strengths (e.g. successes) and weaknesses (points to improve) on items and on dimensions. In AGORA and NISB, the 2009 results could be compared with the 2007 results respectively 2008 results. In 2009, in both partnerships scores and discussion revealed that collaboration had improved and that many successes had been recorded. In AGORA, improvement has been considerable. In NISB the improvement has been moderate, because visibility needs to be improved in order to end the pilot program in a proper way.

The positive approach, based on appreciative inquiry, builds on strenghts and assets of partnerships and their work and thereby contributes to the partners' enjoyment in using the checklist and to increasing preparedness to take action. The positive approach possibly also generates (purposely) bias. However, in most of the pilots the discussion about successes and points to improve came up simultaneously. Michael (2005) also reported that negative experiences were conveyed as well as positive experiences and that, all in all, appreciative inquiry contributed to a richer undertanding. Therefore, the scores need to be interpreted relatively and in combination with the results of checking among partners, discussion and, if possible, interviews. When the checklist is being discussed, probing the reasons behind relatively high and low scores works very well, as our pilots show.

Facilitating participation

The checklist was developed in a participatory way, and consecutively applied and evaluated. This resulted in continual improvement of the checklist. To support participatory use, the checklist is flexible, both in items to be included and accompanying methods to discuss the outcomes. Partnerships that use the checklist, should realize that the main function of the numbers in the checklist is to summarize strengths and areas for improvement at a glance and that the main asset of the checklist is to stimulate feedback and discussion.

In feedback and discussion, partners are challenged to reflect on the dynamics

of their work, ongoing processes, outcomes, their own and other partners' position and contribution and so on. This was confrontational in two partnerships, but in the end sustained coordinated action. Confrontation presents an opportunity to clarify different views. However, partners need to feel safe and comfortable to do so. When a partnership is not running smoothly, we advise to conduct individual interviews in combination with the checklist. This may help to unravel what is going on and facilitate discussion. By discussing the different views, the partners set in motion a learning process that potentially creates a way to combine different views, reach consensus and thus leads to an innovative project. In general, active facilitating increases the chance of successful collaboration and desired outcomes for all partners (Naaldenberg et al., 2009).

Actionable knowledge

In this study, we used an action research approach, resulting in the generation of actionable knowledge in all partnerships. Cook (2008) recommends 'action' as a legitimate component in research designs for programs that aim to effect community-level change. A tool needs to meet validity criteria: both internal validity (Granner and Sharpe, 2004), which is addressed by using verification techniques (participant check, triangulation), and external validity, which is based on practice-based research with attention to context and to connectedness of program levels (Glasgow and Emmons, 2007). Paying greater attention to the issues of external validity and to intermediate or process outcomes enhances relevance to particular settings and will lead to better applications and programs (Green and Glasgow, 2006; Tones, 2000). Therefore, we expect the results of this study to be relevant to other partnerships. However, a number of relevant issues still need to be addressed. These issues are the further refinement and improvement of the checklist and its use, the optimum composition and number of required items, the most appropriate accompanying methods and the features and context of partnerships that need to be taken into account. Up to now, our research is characterized by its explorative nature. To address the mentioned issues and to further validate the checklist, more research is needed. Future research can be focused on the continuation of the present research: evaluate the use of the checklist in more partnerships and to re-use the checklist at multiple times in the same partnerships. Also, future research can focus in more detail on how items are interpreted by partners.

7.5 Conclusion

The action research approach facilitated the development and piloting of a checklist with 25 core items.The checklist is a useful means for partners to overview their working and monitor their successes as a partnership promoting change. In combination with feedback and discussion, the developed checklist enabled the facilitation and evaluation of community health promotion partnerships that differ in context, phase of the program, scale (national and local), topics addressed (overweight, healthy ageing) and number of partners. The use of the principles of appreciative inquiry in the checklist

and methods contribute to improving communication and communication structures, to visibility, to clarifying outcome expectations, to celebrating (small) successes and to facilitating regular evaluation.

Cross-checking and discussing results with partners and triangulation with interview data increases the reliability of the results of the checklist. Piloting in multiple cases contributes to the checklist's external validity. The parallel investigation of the checklist in different partnerships resulted in all cases in actionable knowledge. The checklist helped partnerships in this study to understand processes and to create community and systems change and hence can potentially contribute to achieving population-level health outcomes.

Acknowledgements

The paper is partly based on data gathered as a part of the pilot project *Health Promotion Framework*, carried out in 2007. This pilot was organized by the Netherlands Institute for Health Promotion (NIGZ) and funded by the Netherlands Organization for Health Research and Development (ZonMw). AGORA's healthy ageing project is funded by ZonMw. We are grateful to all partnerships who participated in developing and piloting the checklist. We also thank Jenneken Naaldenberg for her comments on a draft version of this paper.

8

Facilitating and evaluating supportive social environments: conclusions and future directions for community health promotion

8.1 Introduction

Intersectoral collaboration and community participation are key strategies that practitioners, scientists, and policy makers are challenged to apply in health promotion. However, they report uncertainty on how to facilitate and evaluate community health promotion programs. Consequently, the effectiveness of health promotion may not be evaluated on all relevant dimensions. Therefore, the main research objective of this study was to gain the required knowledge to contribute to the development of methods, tools and theory to facilitate and evaluate community health promotion.

Attempts to evaluate health promotion programs show that there is a need for flexible and participatory approaches that consider the context and that measure processes as well as outcomes at different levels and moments in time. This thesis has shown that changes in the social environment are important but have been ignored in the past. Case studies guided by action research, or in which action research was part of the research activities, were selected as objects of study for this thesis. Methods and tools were (further) developed and piloted, and a theoretical framework was designed. During the research process, significant and challenging themes emerged, relating to the principles that underlie community health promotion and the consequences for science, practice, and policy.

This thesis is composed of papers for different journals. To bring the thematic strands together, this chapter starts with an overview of Chapters 3 – 7. The main findings of the study are synthesized in terms of single- and double-loop learning (8.2). Next, knowledge gained on approach, methods, and tools (8.3) and theoretical insights that contribute to the field of community health promotion (8.4) are discussed. The chapter concludes with future directions in community health promotion for science, practice, and policy (8.5).

8.2 Main findings

To discuss the main findings of this studies, Argyris' (1976; Argyris and Schön, 1996) concepts of single-loop and double-loop learning are used. As described in Chapter 2, in single-loop learning, individuals, groups, or organizations modify their actions according to the difference between expected and obtained outcomes. In double-loop learning, the individuals, groups, or organizations question the values and assumptions that led to the action in the first place. Double-loop learning is learning about single-loop learning and is on a higher level. Argyris' organizational learning model (or action science) is based on detecting and adjusting errors or shortcomings, and is grounded on the deficit models that historically prevailed in science. Studies in this thesis, however, are also guided by perspectives that are more compatible with health promotion: the salutogenic theory (Antonovsky, 1996) and the assets approach. Those perspectives trust people's resources and capacity (health assets) to create health and to support development towards positive health. This implies that, in addition to shortcomings, assets also are identified. To detect and stimulate assets, the principles of appreciative inquiry (Cooperrider et al., 2005) have been incorporated in methods and tools used

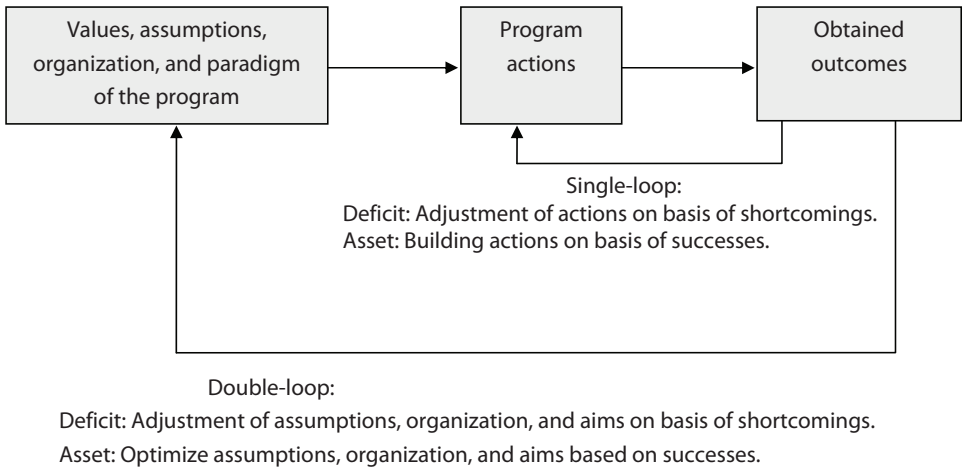


Figure 8.1 Combined deficit and asset model of single- and double-loop learning (partly based on Sadler-Smith, 2006, p. 210).

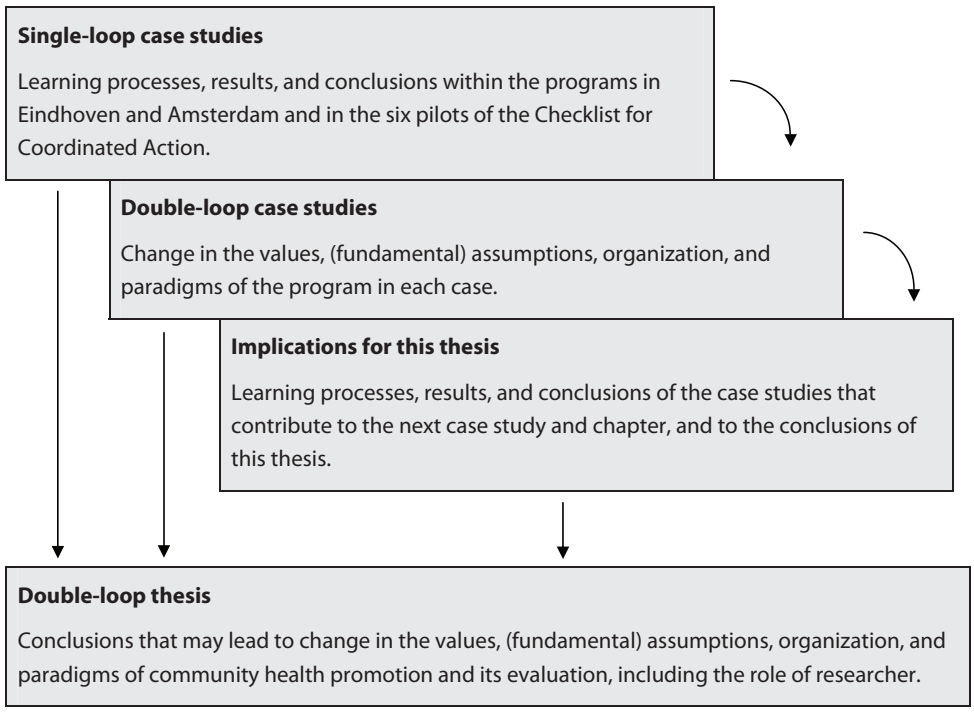


Figure 8.2 Loops in this thesis.

in this thesis. Health assets (or strengths) may also contribute to changes in program actions, and in values and assumptions of the program. Figure 8.1 visualizes loop learning under both the deficit and the asset approach.

Learning loops are applicable to the cases described and to the overall learning processes in this thesis. For cases or programs, single-loop learning results in improving the program. Double-loop learning results in adapting the assumptions, organization, and aims of the program. The adaptation of program organization and aims usually requires policymaking processes, involving, for example, decisions on the reallocation of money or resources.

For the thesis, single-loop learning means that detected shortcomings and assets in each of the case studies contributed to the program and to the evaluation of the next case. Moreover, the overall lessons may – eventually – contribute to changes in values, assumptions, organization, and paradigms of the science and practice of community health promotion. To realize those changes, policymaking is also necessary. The overall lessons can therefore be interpreted as double-loop learning (see Figure 8.2).

Chapters 3 – 7 each deal with one research question. The learned lessons in one chapter are the points of departure for the next chapter. The consecutive research questions are summarized in Box 8.1.

Community program in Eindhoven (Chapter 3)

The action approach revealed that the *Working on Healthy Neighborhoods* program was at an impasse, shortly after its start. There was no agreement on the aims and objectives as set beforehand by the Municipal Health Service (MHS) and funding agency. Interviews, feedback of results, and discussion enabled the stakeholders to reformulate aims and objectives that were congruent with stakeholders' needs and desires. Roles and tasks were discussed as well, resulting in a collaboration structure, centrally steered by the MHS, through which activities with and for inhabitants could be organized. In time, inhabitants increasingly initiated, developed, and implemented

Box 8.1 The research questions of this thesis

1. What was the value of the methods and tools used in the Eindhoven case to facilitate and evaluate *intersectoral collaboration* as part of the social environment in community health promotion?
2. What was the value of the methods and tools used in the Amsterdam case to facilitate and evaluate *community participation* as part of the social environment in community health promotion?
3. What are the challenges for coordinated action on health promotion and what *factors* are important *in achieving and sustaining coordinated action for health*?
4. What concepts belong to the *social environment of health* and how can the concepts be defined and conceptualized into variables to be used in action research?
5. What tools can be (further) developed based on variables that facilitate and evaluate *changes in the social environment* in community health promotion?

activities. The program gradually shifted from a top-down to a bottom-up approach, as more stakeholders became involved.

Initially, the action approach was regarded with skepticism by health professionals and other researchers. As action research methods facilitated the re-start of the program and also the baseline measurement, the action research approach was accepted and eventually became the leading research focus. As stated by Soltis-Jarrit (1997), the action research has to prove itself in time.

The tools to measure participation were helpful in visualizing results. However, the ranking system appeared to be difficult to understand because of the level of abstract thinking required in judging one's own participation level. In addition, the ranking system was applied to evaluate the program, whereas stakeholders tended to focus on concrete activities rather than on the program.

In 2004, the MHS appointed its own action researcher, and in 2009 scaled up the program to eight neighborhoods. In new evaluation rounds, action research approaches have been further developed (Van Gemert, 2006; Dijkema 2007a; Dijkema 2007b; Dijkema and Spijkers, 2009).

In conclusion, the participatory action research facilitated the re-start and continuation of the program, the achievement of successful intersectoral collaboration in the two neighborhoods, the initiation of community participation, and the baseline measurement of the quasi-experimental design. The research question leading this chapter – on the facilitation and evaluation of intersectoral collaboration – resulted in lessons for both practice and research. Figure 8.3 summarizes the lessons learned and the implications for this thesis.

Community program in Amsterdam (Chapter 4)

In the *Healthy Lifestyles* program, the participatory action research with and for Turkish and Moroccan women facilitated the development, implementation, and evaluation of activities to reduce overweight. The women's participation was considerable: in total, 120 women (15% of the 800 Moroccan and Turkish women) participated in one or more phases of the program. The main reasons for this success were that women were interested in managing weight and that health professionals communicated clearly and regularly about the aims of the program and about the tasks and roles of all participants. Women who participated in interviews or focus groups also participated in the development and implementation of aerobic lessons or nutrition intervention. To get and keep stakeholders involved seemed to be a challenge for the professionals because the women were not accustomed to participating in such programs, and some stakeholding organizations needed to be convinced of the importance of their participation. For the program, this meant that extra time and capacity were needed and that professionals required strong facilitating competencies, especially in communication.

Pretty's ladder of participation was improved, based on the lessons from the Eindhoven case. Different (phases of) activities were defined. Desired and achieved levels of participation, as scored by the target group and professionals, corresponded

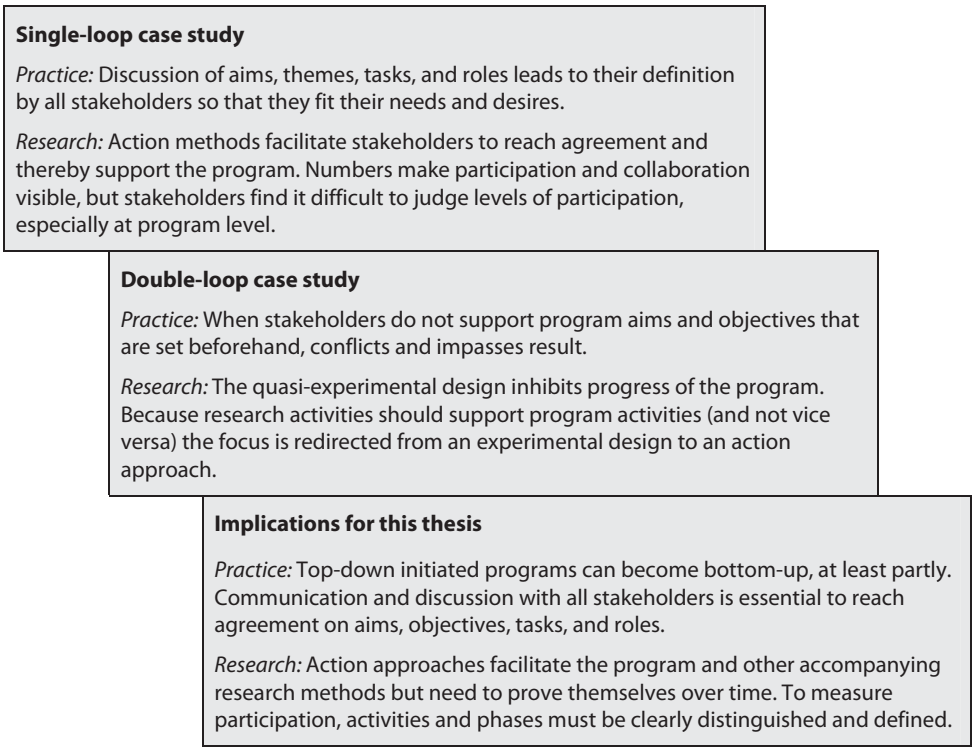


Figure 8.3 Main lessons from the Eindhoven case (Chapter 3).

well. This correspondence is an indication of the internal validity of the scores. The adjustments made the tool more usable, but it also appeared that it may be possible to further simplify the tool. In addition, its ability to initiate dialogue could be more accentuated.

The research question leading this chapter – on the facilitation and evaluation of community participation – resulted in lessons for both practice and research (Figure 8.4).

Although external funding stopped, the program continued and new programs started (see also Box 8.2). Follow-up of research over a number of years on programs and spin-offs should be part of the evaluation to be able to report all results.

Factors in achieving and sustaining coordinated action (Chapter 5)

On the basis of the lessons in Eindhoven, Amsterdam, and other Dutch programs, factors were identified that are important in achieving and sustaining intersectoral collaboration or coordinated action for health.

To achieve coordinated action, it appears to be important that relevant stakeholders, including inhabitants, are represented, and that agreement on aims, objectives, tasks,

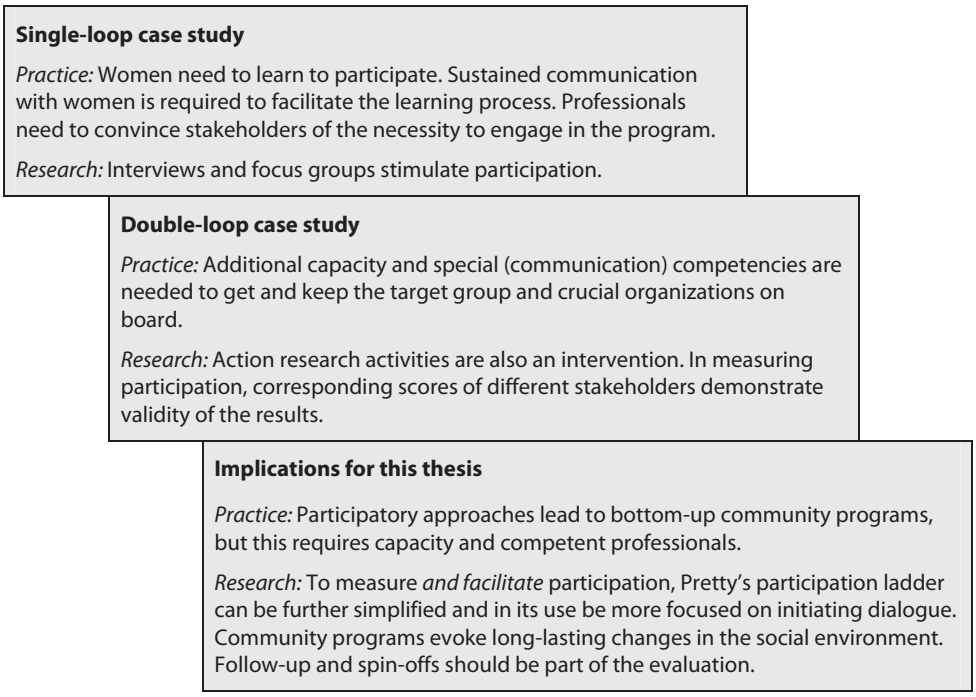


Figure 8.4 Main lessons from the Amsterdam case (Chapter 4).

and roles is essential. A stimulating strategy to facilitate open communication and explicit discussion on this is to involve stakeholders in research activities such as interviews, focus groups, feedback, and evaluation sessions. Commenting on research results gives stakeholders the experience of having a voice and stimulates them to be involved. To sustain coordinated action, a smooth communication structure, a competent manager, and visibility of activities, outcomes, and individual contributions are important factors. Visibility functions as an incentive for involvement and action,

Box 8.2 Spin-off as a result of the program in Amsterdam

In Amsterdam, new projects guided by action research have been set up. One of those projects is a follow-up on the *Healthy Lifestyle Program: Beweeg-je-Beter* (Move Yourself Better). In this program, migrant women and women of low socio-economic status are referred by the general practitioner to the program, which offers physical exercise classes. Also, other municipal health services were inspired by the results of our case studies. For example, the program Health Together in Zwolle (of which the workgroup *Healthy and Affordable Food*, one of the pilots of the Checklist for Coordinated Action is part), appointed an action researcher for four years.

and therefore it is important to focus on short-term outcomes, to evaluate activities regularly, to give feedback, and to stimulate discussion.

The research question leading this chapter resulted in the identification of six factors that all together contribute to changing the (social) environment of health.

A framework with variables to be used in action research (Chapter 6)

Based on the lessons learned from the previous studies, a theoretical framework and guidelines to evaluate changes in the social environment of health were developed. Participation and collaboration were taken as entry points because they subsume many environmental concepts (e.g. social capital and empowerment) and are core concepts in moderating the relation between the social environment and health predicting mediators such as quality of life and lifestyle.

Variables and relevant conditions were synthesized in a framework, composed of quantitative and qualitative variables, that addresses multiple program levels (individual, organizational, coalition, and community), and process and outcome measures. The framework, built on complementary perspectives of theory and practice, provides common ground to further develop methods and tools in a flexible way and to build more practice-based evidence to evaluate the social environment of health.

The framework addresses the research question leading this chapter by putting together the concepts of the social environment of health and the variables that can be used in action research.

Coordinated action checklist (Chapter 7)

Based on the framework, the coordinated action checklist was developed as a tool to facilitate and evaluate community health promotion. The checklist contains 25 items that address the multiple program levels (from individual to community) and different dimensions of partnership work. The checklist was developed and piloted with and in six partnerships. The checklist items and the accompanying methods (interviews, discussion, feedback) were adapted to the context and specific needs of the partnership. The use of the checklist resulted in building agreement on vision and aims, increasing participation, better functioning of the partnership, and improving external relationships and visibility.

Thus, in all cases, actionable knowledge was generated, and consequently changes in the partnership, program, and activities could be realized. Feedback and discussion on the results of the checklist (cross-checking) helped to interpret and celebrate the successes, and to clarify and address the points that needed to be improved.

In Chapter 7, the leading research question is addressed by the development of the coordinated action checklist, a tool that facilitates and evaluates changes in the social environment of health in community health promotion. Figure 8.5 summarizes the main lessons.

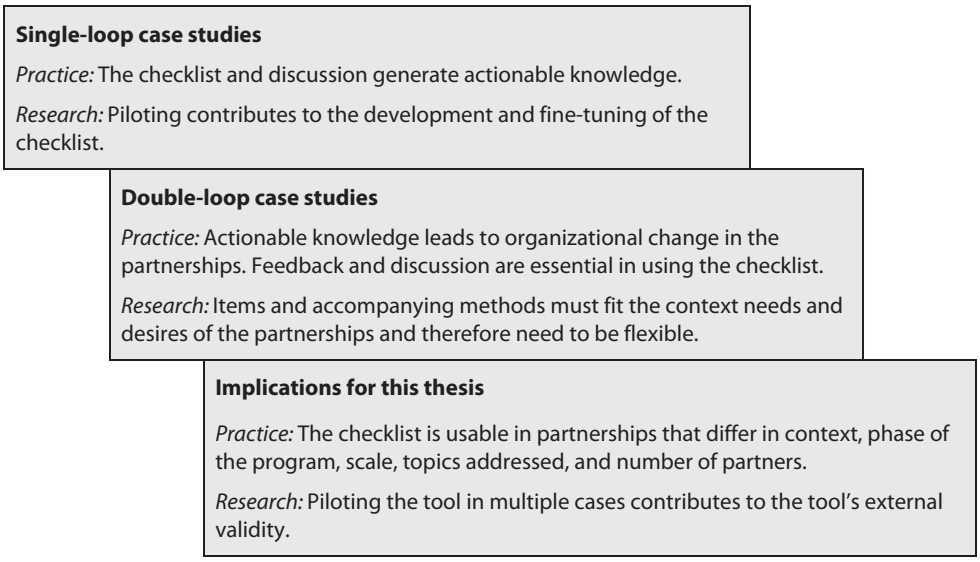


Figure 8.5 Main lessons from the Coordinated Action Checklist (Chapter 7).

Conclusion on main findings

Action research has proved to have had a facilitating and evaluating function in these case studies. The methods and tools developed assess both assets and deficits of programs. Feedback on strengths and areas for improvement invokes dialogue, discussion, and reflection that results in actionable knowledge. In the next sections, the knowledge generated on approach, methods and tools, and the contribution of this thesis to the theory in relation to health promotion, are discussed in more detail.

8.3 Knowledge generated on approach, methods, and tools

Action research appeared to be suitable to facilitate and evaluate community programs. As Green and Mercer (2001) put it, the results of action research are relevant to the interests, circumstances, and needs of those who would apply them and are immediately actionable in local situations. The simultaneous facilitation and evaluation resulted in practice-based knowledge and in insight on appropriate research approaches in community health promotion.

In this section, the gained knowledge is described. First, the reasons why action research fits well in community health programs are stated. The barriers that action researchers face in practice and in science are then addressed, and it is explained how action research meets scientific criteria comprehensively. This is followed by an explanation of why community health promotion requires both assets and deficits to be dealt with, and why the principles of appreciative inquiry are usable in doing so. The importance of feedback in relation to methods and tools is elucidated. The

section concludes with a number of methodological considerations that arose during the research process.

Why action research?

The choice of action research in this thesis was based on the insight that the suitability of a randomized controlled trial (RCT) is limited in community health promotion, as found at first hand in Eindhoven. The RCT initially tended to hinder rather than to support the program (Chapter 3) and showed only a modest impact on health behaviors. It is questionable whether an intervention lasting only a few years can demonstrate an impact on behavioral outcomes (Kloek et al., 2006). Others also report difficulties in applying RCT research in community health programs (De Haes et al., 2002; Horstman and Houtepen, 2005; Kemm, 2006; Merzel and D'Affliti, 2003; Voorham et al., 2002). The evaluation of community health promotion interventions poses methodological challenges due to complexity, the need to take account of the social and political context, the flexible and evolving nature of interventions, the range of outcomes being pursued at the individual and community level, and the absence of appropriate control groups for comparison (Koelen et al., 2001; Rootman et al., 2001, Tones, 1999; see also Chapter 1). This does not mean that RCTs are not valuable for evaluation purposes, but what approach is most suitable and when must be critically scrutinized. When control of the setting and population under study can be achieved for the time of the trial, and where there is a focus on a single intervention with an expected dichotomous outcome of success (or failure), the RCT is a powerful methodology (McQueen, 2007). When evaluation aims to analyze a specific situation and its problems, to find solutions to address these problems, and to look at opportunities for putting these solutions in practice, an action research approach is most appropriate (Koelen and Van den Ban, 2004; Whyte et al., 1991). Thus, to capture and assess the full (systemic) effects of an intervention, which range from the purely technical stance of an RCT ('did the intervention reach its aims?') to a pragmatic purpose as in action research ('how can the findings contribute to continuous improvement in the specific context?'), the use of multiple approaches is highly recommended in order to obtain a validated assessment of whether the intervention works, how, for whom, and under what circumstances (Sadler-Smith, 2006). Saan and De Haes (2005) refer to this combination of research approaches as 'RCT-plus'. It is, however, perhaps more appropriate to use terms such as integral or comprehensive research because these terms reflect the fact that different approaches are equally essential.

As this thesis has shown, action research is valuable because it generates knowledge that is relevant to the involved stakeholders and is immediately actionable. Thus, action research is an essential and complementary approach in capturing and assessing the full effects of a program.

Barriers faced by action researchers

The value of action research is demonstrated in this thesis and by others (e.g. Green and Mercer, 2001; Israel et al., 2005; Koelen and Van den Ban, 2004; Minkler and

Wallerstein, 2003; Rice and Franceschini, 2007). However, action researchers face skepticism because of the alleged subjectivity of action research and difficulties experienced in getting papers published in journals and in meeting standards set by universities.

When tightly designed studies like RCT are being compared with more flexible research approaches like action research, an important issue relates to notions of objectivity and subjectivity in the interpretation of the results, and the extent to which a researcher can be objective in these circumstances. The initial skepticism towards action research encountered in Eindhoven derived from this objectivity-subjectivity issue: the active involvement of the researcher in practice raised concerns about the independence of the action researcher. However, the researcher carrying out the RCT could not completely separate herself from practice either: she attended meetings to build support for the baseline measurement. Thus, separating oneself from practice is often not possible and even not necessary (Harper and Kuh, 2007). The supposed objectivity of RCTs in community health programs seems to be relative as well. On the basis of their experiences with the community program *Heartbeat Limburg*, Hostman and Houtepen (2005) also concluded that, in the end, practical decisions are given precedence over decisions that guarantee control of the conditions.

The action research in this thesis was undertaken according scientific criteria. Other research approaches could potentially benefit from the way in which quality standards of action research and, more generally, qualitative research are met. The establishment of, and adherence to, criteria are themselves subjective acts that are also relevant for the conventional inquiry criteria. In RCTs, for example, the choices made in the research process and the actual implementation could be accounted for in more detail. For example, it should be explained and argued how the development of a questionnaire, items and measurement scales relate to the hypothesis or aim of the study (construct validity) and methods should be built in to describe how the intervention was actually implemented in practice (Oakley, 2005). Thus also quantitative papers become more transparent and better as a consequence of thoroughly meeting quality criteria – a fact that may have implications for journals' policies, especially relating to space. The experience is that journals are not prone to publish action-based research because describing multiple methods and making transparent the data interpretation conflicts with journals' strict space policy. Another reason for the limited number of qualitative research publications is that there is still unease about action research methods. For many, including health promotion practitioners, the RCT remains the bulwark, despite forceful arguments to the contrary (McQueen, 2007). The epidemiology journals in particular tend to adhere to RCT designs. Internal validity is emphasized often at the cost of the contextual factors, whereas the contextual factors make science relevant to practice (Green et al., 2009a; Green et al., 2009b). Health promotion journals are open to qualitative research publications, but legitimately require a detailed and transparent methods section, while adhering to a strict space policy. Thus, the number of qualitative research papers remains limited. This self-fulfilling mechanism favors RCT designs and also limits academic freedom. Academic freedom is also limited by universities,

as action researchers have trouble in meeting academic reward systems (Green and Mercer, 2001).

The existing preference for RCTs and the policies of journals and universities reinforce each other. Up to now, journal editors and university boards have not been able to break through this vicious circle. As a consequence, qualitative-oriented researchers are penalized in terms of space, opportunities and academic freedom. Definitely, this is not a good thing for the development of community health promotion and its evaluation.

How to guarantee scientific quality in action research?

Scientific quality standards were applied by combining different verification techniques (see Chapter 2, Table 2.1), the criteria for qualitative research proposed by Lincoln and Guba (1985), and the concepts of single- and double-loop learning (Argyris, 1976). Moreover, the conventional inquiry criteria of internal validity, external validity, reliability, and objectivity were complied with in the published papers.

The use of different quality standards, in different combinations and phases of the research process, made the methodology and interpretation of results understandable and transparent to stakeholders and external readers, and contributed to data validity. For example, the internal validity in the case studies was increased by triangulation of methods (e.g. interviews and checklist) and by feedback of results and discussion (participant check). The internal validity of the research findings in the thesis was increased by verification techniques such as consultation with independent experts. The transparency of data interpretation was obtained by applying the concepts of loop learning. The external validity of the research findings was enhanced by multiple case studies and the literature review.

Smidt et al. (2009) have suggested that, to increase internal validity, the results due to the program and the results due to the researcher's interference should be separated. However, in light of the experience gained from the case studies, this is neither appropriate nor possible because in action research knowledge is co-generated and thus cannot be separated. Neither was it necessary to do so because methods are available to validate results (participant check, triangulation). In addition, those methods facilitate the ongoing co-generation of knowledge.

To conclude, this thesis has proved that the quality of action research can be ensured by applying a combination of different verification techniques and scientific criteria.

Continuous assessment of assets and deficits

In essence, health promotion is about the factors or assets (capacities and resources) that enable people to lead an active and productive life. Addressing assets is beyond doubt unique compared to other disciplines. For example, epidemiology is still based on the deficit model and focuses mainly on risks and problems. Kooiker and Van der Velden (2007) label this focus as 'risk factor epidemiology'. An unintended success of this risk factor epidemiology is the flood of reports about health risks that the average

member of the public finds impossible to distill into meaningful information.

The focus on assets and challenges requires accordant objectives and indicators for evaluation. However, as formulated very well by the epidemiologist Breslow (1999), objectives enunciated by health agencies (for example: Increase moderate daily physical activity by at least 30% by the year 2015) deal with risk factors (e.g. coronary heart disease). Those objectives do not constitute direct measures of health being promoted in the sense of greater capacities for living or, as the salutogenic perspective proclaims, to move towards the health end of the spectrum. An example of such an objective is 'to increase a person's skills' at the individual level or 'to realize a collaboration structure that initiates and sustains participation of community members' at the organizational or community level.

An assets approach encourages the use of a new set of evaluation indicators (Morgan and Ziglio, 2007). Bauer et al. (2006) and Pelikan (2007) plead for the development of a systematic salutogenic indicator in the field health promotion. Such indicators must address individual and community health resources. Lindström and Eriksson (2009) are the first to develop a coherent research model to implement salutogenesis in health promotion practice and research. The framework developed in this thesis (Chapter 6), in which participation and collaboration were taken as entry points to the social environment of health, is an example of salutogenic indicator development specifically for community health promotion.

The use of the principles of appreciative inquiry in methods and tools stimulates participation (Chapter 7). Positively formulated items in tools, and questions in interviews and discussions, build on strengths and assets of stakeholders, thereby contributing to the stakeholders' enjoyment in participating and collaborating. Appreciative inquiry can create a unique climate for collective dreaming that can make a group ready to be open about deeply held desires and yearnings. In this climate, then, a different social reality can evolve (Bruse, 2001). A possible disadvantage may be the positive bias generated, but this seems to be limited because, in addressing assets, people automatically tend to mention problems (or points to improve). This happened in discussing the Checklist for Coordinated Action (Chapter 7) and was also observed by Michael (2005). Thus, appreciative inquiry contributes to a richer understanding. However, in conflict situations, as experienced in Eindhoven and as described by Bruse (2001), appreciative inquiry overshoots its mark because stakeholders first need to voice their frustrations before they are willing to talk about positive things. This implies that the usability of appreciative inquiry depends on the specific situation.

Immediate feedback, dialogue, discussion, reflection

An essential feature of action research is immediate and continuous feedback. Feedback takes place during the program, is directly usable, and stimulates stakeholder participation and learning processes.

As feedback takes place immediately, the results contribute to the program. In contrast, RCT results are usually completed after the program has finished and are therefore not of use to the program itself. In general, the process of making RCT results

available takes many years as publication processes are time consuming (Green, 2001, 2009b). In addition, journals are mainly accessible to researchers in the specific field of science and not to other professionals, let alone practitioners. Thus, RCT results become available after a long time, and to a limited and mainly academic audience. Action research results become available immediately to the relevant stakeholders as shown in the case studies (Chapters 3, 4 and 7).

By tracking changes continuously and using this information to steer the intervention in strategic directions, the effect of the intervention is amplified. The way to use feedback is to enhance positive feedback loops – the ones that move the interventions towards the desired change – and to counteract negative feedback loops – the ones that work in the opposite direction (Hawe et al., 2009).

As experienced in the Eindhoven and Amsterdam cases and in the partnerships (Chapters 3, 4 and7), through feedback, stakeholders are challenged to participate actively. By participating, e.g. dialogue, discussion, and reflection, learning processes are stimulated that ideally contribute to reaching consensus and collective action (Muro and Jeffrey, 2008). Dialogue, the most personalized communication method, allows free and creative expression of ways to address complex issues. In discussion, different views are presented and defended in search of the 'best' decision. In the reflection phase, what happened and why is considered. Dialogue provides the opportunity for stakeholders to get to know each other well, and to get first hand information on problems, strengths, and their implications. Also, dialogue is an effective instrument in stimulating people to change behavior (Koelen and van den Ban, 2004).

In learning processes, reflection is seen by many as crucial (Sadler-Smith, 2006). Reflection requires an open and curious mindset, and constructive critiques from oneself and others. Self-reflection especially deserves attention as it may be hindered by self-referentiality. Self-referentiality means that one perceives oneself and the environment in terms of one's own norms and perceptions. This, and also the tendency of individuals to pay attention to only a selection of the stimuli surrounding them, may result in tunnel vision or 'blinding' insights (Koelen and Van den Ban, 2004; Van Woerkum, 2000). To break through self-referentiality, one is dependent on other stakeholders and their feedback; this, again, requires clear communication structures and open discussions. To support the self-reflection of the (action) researcher, guidance or coaching of (independent) experts and/or an outside panel may be of great help.

This thesis has shown that feedback contributes to the usability of results, increases the effects of the program, stimulates participation, and sets learning processes in motion. In order to handle feedback, stakeholders, including researchers, must be able to reflect and to self-reflect.

Methodological considerations

This thesis has argued that the action research approach is effective and of scientific value. It also provides methods and tools that enable scientists and practitioners to facilitate and evaluate community health promotion. It focuses especially on measuring assets as this is an evolving and promising way to support social environments for

health. However, the cases in this study and the choices made on methodology entail a number of limitations and challenges.

First, only action research approaches were applied. In Eindhoven, the opportunity arose to collaborate with researchers from the Erasmus University of Rotterdam and to learn how to integrate different research approaches. In Amsterdam, only action research was undertaken. As a consequence, results were obtained on participation and collaboration, but not on indicators such as changes in body weight. The prerequisites for carrying out an RCT could not be met (e.g. time span and sample size). The alternative, an adapted or small-scale RCT, was not researched.

Second, the principles of participation and collaboration were taken as entry points through which to bring about change in the social environment of health. The value of participation was demonstrated; this has contributed to methods and tools to quantify participation levels with the aim of visualizing at a glance the strengths and areas for improvement. However, the focus on fostering and measuring participation and collaboration in health promotion may have neglected other important principles or factors that contribute to health (e.g. national and local policies, leadership).

Third, ancillary benefits of participation have not been addressed. Hawe et al. (2009) describe this as the enablement or improvement of the structural position of people and organizations, assuming that building competence or capability is part of the objective of the interventions. As already mentioned, further results on participation and collaboration in Eindhoven and Amsterdam were realized after the time span dedicated to the research. Due to constraints in time and funding, it was not possible to investigate and report those ancillary results. Thus, the full range of results of the community health programs in these studies is not yet known.

Fourth, the programs involved as cases in this thesis addressed different target groups and topics. We did not elaborate on actions or evaluation methods specific to one target group or topic. This might have yielded relevant information as it is known that health has different meanings for men and women, for autochthonous and migrant women, and so on. On the other hand, working with the principles of health promotion means that multiple target groups and multiple topics can be addressed. In Eindhoven, several topics were addressed (nutrition, exercise, stop smoking). We did not investigate it, but there is growing evidence that multi-behavior interventions have a greater impact on public health than single-behavior interventions (Prochaska et al., 2008). This indicates that the potential of principle-based health promotion is yet not fully addressed and assessed.

Fifth, as the primary focus was on the practice and science of health promotion, it looks like the third important pillar of the science-practice-policy triangle (Saan and De Haes, 2005) has been neglected. In the case studies, stakeholders representing policy participated both in the program and in research activities. To adjust and optimize the assumptions, organization, and aims of the program (double-loop programs), policymaking was required. In fact, policy created the opportunities and constraints by determining the health goals to be addressed, research approach, funding, and the timeframe. Also, the papers in this thesis were shaped and improved by journals' policies.

Sixth, theories on systems thinking and actor network theory were not explicitly used, but those theories may provide a way forward in harnessing the complexity of health promotion (e.g. Green, 2006; Hawe et al., 2009; McQueen and Kickbush, 2007; Naaldenberg et al., 2009; Potvin, 2007). As systems thinking also entails deliberative dialogues, strengthens capacity in order to create new and common ground for better relationships and partnerships, and encourages an active and innovative flow of (contextualized) knowledge (De Savigny and Adam, 2009), it fits well with the issues raised in our research.

The methodological issues raised reveal many challenges that lie ahead in the evaluation of community health promotion: building multi-approach research, measuring ancillary participation results, addressing and assessing results in multiple-topic interventions, involving policy more explicitly, and making use of (more) appropriate theories.

8.4 Contribution to the theory of health promotion

The everyday practice of health promotion and its facilitation and evaluation as described in this thesis contributes to theory building. This section addresses theory relating to the cardinal role of participation, principle-based health promotion, and the role of health professionals. It is debatable whether the developed theories, such as the framework in Chapter 6, are 'real' theory or not. McQueen (2007, p. 23) states, '… generally speaking the level of theoretical discourse in the field is centered around "models" and "frameworks" rather than on direct theory'. Nonetheless, it is argued here that the framework contributes to the development of theory in the field of health promotion.

Participation as a core principle in health promotion

Community participation and intersectoral collaboration are core principles in community health promotion. Both concepts entail the active participation of stakeholders, community members and professionals, with the aim of increasing control over the determinants of health. Participation and related concepts like social cohesion are acknowledged also in other domains like citizenship, voluntary work, employment, sports (e.g. Dekker and De Hart, 2009; Schnabel et al., 2008). It is only in the last decade that the search for ways to deal with participation has started. The urge stems from the growing insight that participation contributes to health through multiple domains and pathways (see Chapter 6) and that participation can serve multiple purposes in health promotion programs. The multiple purposes of participation range from enhancing the efficiency of the program to the empowerment of stakeholders (see Chapter 4). The case studies in this thesis have demonstrated that participation is a learning process and that stakeholders appreciate taking part in research activities (Chapters 3, 4 and 7).

Use was made in this thesis of theories to explain how participation functions as a trigger in social change processes and how to manage and stimulate participation.

In line with Rogers' (1995) theory on diffusion of innovations, some stakeholders are quickly prepared to participate or collaborate (innovators and early adopters), whereas others, the majority, need more time and will only join after results have become visible. Community members often do not participate spontaneously because it may involve their spending time without recompense (e.g. mainly the researcher will benefit), especially when community members have to adhere to bureaucratic and administration procedures, such as writing proposals to obtain funding. On the other hand, organizations must be prepared to collaborate and be equipped to deal with participating (and empowered) community members. The important findings from this research are that community members have to learn to participate (why and how) and that organizations, including local government and universities, need to be convinced of the importance of collaborating (e.g. explicate the relevance of health). If this succeeds, and more stakeholders, including community members, participate and are involved in recognizing the need to change (problem definition) and in innovating new ideas (problem solution) (Rogers and Schoemaker, 1971), the program can gradually shift from a top-down to a bottom-up approach (Chapter 3). In practice, it can be useful to combine both approaches (Koelen and Van den Ban, 2004).

This thesis has proved that research activities stimulate participation. The sharing of experiences and expertise and commenting on research findings can be enjoyable and makes stakeholders feel that their opinions are being taken seriously. By discovering their own abilities and knowledge, stakeholders are enabled to comprehend their own situation and to take responsibility for it. In addition, stakeholder participation in research activities contributes to understanding the reasons for the successes and failure of a program.

In sum, participation as a core value has great potential that is not yet fully harnessed. Systematic learning processes can make participation manageable, and research activities are a proper way to facilitate those learning processes.

Principle-based health promotion programs

The research in this thesis is driven by principle-based health promotion. According to Rootman (2001), health promotion guided by principles is empowering, participatory, holistic, intersectoral, equitable, sustainable, and multi-strategy. Principle-based programs flourish in settings like a community or neighborhood (Saan and De Haes, 2008). Principle-based programs differ from so-called pre-packaged programs. Pre-packaged programs usually address a specific topic and are mainly developed in the long health education tradition.

The characteristics of pre-packaged and principle-based programs are contrasted by many authors (Bealieu, 2002; Hawe et al., 2009; Kooiker and Van der Velden, 2007; Laverack and Labonte, 2000; Laverack, 2008; Merzel and D'Affliti, 2003; Potvin, 2007; Saan and De Haes, 2008) and in this thesis (see Table 8.1).

An essential characteristic of principle-based programs is that stakeholder participation and learning processes are put center stage. Consequently, principle-based health promotion can be viewed as learning to live a healthy life (Horstman

Table 8.1 Characteristics of pre-packaged and principle-based health promotion

Pre-packaged	Principle-based
Top-down.	Bottom-up.
Program can be copied/repeated.	Principles guide planning, implementation, and evaluation. Mix of principles may vary.
Education of target group: knowledge transfer.	Co-generation of (actionable) knowledge: transformation (empowerment, learning).
Imposition of a healthy lifestyle.	Learning to live a healthy lifestyle.
Validated on scientific knowledge only.	Validated on co-generated knowledge.
Based mainly on individual health psychology theories.	Based mainly on community level and ecological theories.
Individual-focused explanation of health behavior.	Behavior shaped in dynamical interaction with the social environment.
Targeted at individual change (lifestyle and behavior).	Targeted at community change, including change in the social environment of health.
Homogeneous target group.	Target group can be diverse.
Aims and objectives set by professionals (target group is 'objectified').	Aims and objectives set by all stakeholders.
Oriented by a vision formulated at the start.	Development and adaptation of a common vision by ongoing negotiation.
Agency/professionally managed. Recognized expertise of professionals.	Managed by intersectoral collaboration: community ownership.
Vertical relationships.	Horizontal relationships.
Makes people consumers of services.	Identifies how people can use their talents.
Follows protocol (series of steps).	Addresses opportunities in a flexible and tailored way (menu of activities).
Results measured before and after the program by standardized methods and tools.	Results measured continuously by a mix of methods and tools.
Evaluation is independent of the program.	Research is part of the program or intervention.
Origin in deficit models.	Inspired by salutogenic and assets approaches.
Funding is focused on the development of the program (and neglects practical application).	Funding is aimed at achieving and sustaining collaboration and participation.

and Houtepen, 2005).

In pre-packaged programs, usually a specific topic or lifestyle is central, for example healthy nutrition. However, community members often have other priorities such as child-raising or safety in the neighborhood. Also, motivations to participate are linked more to social motives than to health motives (Horstman and Houtepen, 2005).

Advantages of pre-packed interventions are that they are developed systematically, underpinned thoroughly, and evaluated well, especially with regard to internal validity. However, their effectiveness in another (local) context cannot be guaranteed. In addition, they deprive professionals of using their specific knowledge and their local expertise (see also Kooiker and Van der Velden, 2007). In pre-packaged interventions, the form is standardized, whereas in principle-based interventions the function is standardized, so that the form can vary across contexts (Hawe et al., 2004, 2009).

To benefit from the advantages of both pre-packaged and principle-based programs, they can be combined, provided that feedback takes place continuously. When stakeholders agree that they need education on a specific topic, it is obvious to use a pre-packaged program, or parts thereof. Feedback can lead to necessary adaptations in the use of the pre-packed program.

In principle-based programs, actions of stakeholders are unpredictable in the sense that opportunities are addressed in a flexible and tailored way, and interconnected in the sense that one stakeholder's actions has consequences for other stakeholders' actions. Multiple stakeholders are involved to realize both intermediate and process outcomes at multiple levels. The different interests of stakeholders, the unpredictability of stakeholders' actions, and the multifacetedness of health promotion explain why it is a challenging endeavor to reach agreement on aims, objectives, roles, and tasks, and to realize coordinated action.

On the basis of the case-study experiences, in principle-based health promotion, it is important to formulate objectives on the principles and to set practical and short-term objectives. Lifestyle objectives and objectives on principles are equally important. Defining participation as an objective requires stakeholders to achieve and sustain participation, increases the chance of the program becoming bottom-up, and means that the results of participation are reported as a program outcome. Stakeholders often find it difficult and too abstract to formulate behavior-level objectives as required in RCT designs (e.g. The number of inhabitants eating two pieces of fruit every day is increased by 10% in two years). For stakeholders, it is workable to formulate relatively short-term program objectives (e.g. This year, two walking tours will be organized in the neighborhood).

In spite of the promising features of principle-based programs, in many countries there is a trend towards more pre-packed programs. Governments make serious efforts to centrally steer interventions. In the Netherlands, the Centre for Healthy Living (CHL) certifies interventions that are in theory effective or that have been shown to be effective by research and makes them accessible via a database. The interventions are developed by various organizations like the Netherlands Institute for Sport and Physical Activity (NISB) and the Netherlands Institute for Health Promotion (NIGZ) and habitually funded by the Netherlands Organization for Health Research and Development (ZonMw). To date, the database contains mainly pre-packaged programs (Van Dale et al., 2008). Intended users of the available programs are municipalities, municipal healthcare services and home care organizations.

To conclude, in principle-based programs, participation and collaboration have great potential, and learning processes are encouraged. However, principle-based

programs are accompanied by unpredictability and need flexibility in several ways. This goes against the international prevailing tendency to certify and standardize interventions centrally.

Role of professionals

The role of health promotion professionals deserves special attention. In traditional health education, the main competencies relate to knowledge and expertise. In principle-based health promotion programs, the fostering of participation requires a specific set of competencies and (extra) capacity (Chapters 4 and 5). In the Netherlands and abroad, the competencies needed are discussed. At a national Dutch conference (NIGZ, 2009) it was agreed that the required competencies relate to building capacity, coordinating change processes, and attuning science, practice, and policy to each other. In the Galway Consensus Conference Statement (2008), eight competencies required to engage in health promotion practice are listed: catalyzing change, leadership, assessment, planning, implementation, evaluation, advocacy, and partnerships. Such 'social' competencies are not typically taught in formal institutions.

The experiences in the case studies reveal that required competencies relate to communication, social skills, conflict management, (self-)reflection, flexibility, and perseverance. In fostering participation, important factors for success are a personal approach, rewarding and visualizing participation, and involving stakeholders in research activities. Communication and social skills are important in sustaining personal contacts. In personal contact, the usefulness of participation and the expectations regarding tasks and roles can be discussed. Personal contact facilitates shared understandings, common approaches to solutions, develops trust and respect. The better all this can be achieved, the better chance any initiative for coordinated action has.

Conflict management and self-reflection are needed in working with stakeholders representing different disciplines. In working with people, it is important to consider ethical issues like honesty about interests, tasks, and roles. The provision of feedback may be confrontational, and (serious) conflict situations are no exception in community health programs (Chapters 3 and 5). Dealing with multiple interests, unequal relationships, lay and expert knowledge may necessitate the empowerment of professionals as well (Koelen and Lindström, 2005).

A prerequisite for principle-based programs is that health professionals are flexible and have perseverance, as the encouragement of participation can be time consuming (Chapter 4). However, professionals usually have time allocated to them to innovate and implement programs during a pre-fixed timeframe, but are not allocated time to sustain participation and to report and evaluate the program. The systematic and bureaucratic way in which programs are organized does not fit the requirements of the unpredictable and multi-potential practice of health promotion. As a consequence, community health promotion does not get the chance to prove itself to its full extent and professionals may become frustrated.

In principle-based programs, practice and research are closely related. It is

important that expertise on both is available in the team that coordinates the program. It may be that there is a coordinator and an action researcher (as was the case in Eindhoven) or that the coordinator also monitors and reports on the program (as was the case in Amsterdam).

Above all, principle-based programs require professionals who possess a broad range of competencies to coordinate programs, to work with people, and to evaluate programs.

8.5 Conclusion and future directions for health promotion

This thesis has shown the value of action research in community health promotion as it generates relevant and actionable knowledge that can be used immediately. Scientific quality standards can be comprehensively met in qualitative research, just as in other research approaches.

An important contribution of this research to the theory of health promotion is the framework to facilitate and evaluate supportive environments for health. The rationale to do so is that participation, as a core principle, contributes to health through multiple pathways and it serves multiple purposes: efficient programs and empowerment of stakeholders. However, the full potential of participation and principle-based community health promotion has not yet been fully harnessed and evaluated.

In this section, possible future directions (or double loops) are indicated for science, practice, and policy that contribute to better community health programs and their evaluation.

A healthy research paradigm

Action research is an essential and complementary approach in the evaluation of community health promotion. To capture and assess the full effects of a community health program, different research approaches need to be combined and integrated. Such an integral evaluation research approach should be grounded in a supporting paradigm: a healthy research paradigm. In terms of loop learning, scientists are challenged to consider – and change – the assumptions that underlie the present research paradigm. The plea is not to exchange the existing rationalistic paradigm for a pragmatic paradigm focused on learning – as proposed by Horstman and Houtepen (2005) – but rather to create a paradigm that combines the best of both. As a start, it is visualized how such an integral research approach looks, the ingredients of a healthy research paradigm are summarized, and strategies for moving towards this paradigm are proposed.

An integral research approach considers the societal context (Figure 8.6). Context affects both the way that an intervention operates and the outcomes (Kemm, 2006). In RCTs, the interest centers on the linear process of input and outcome of the intervention (the 'input-black box-output'). On the basis of the cases and of the literature, the term 'Adapted RCT' is purposely used. In practice, it turns out that practical decisions overrule having control over the conditions. In socially complex situations, RCTs

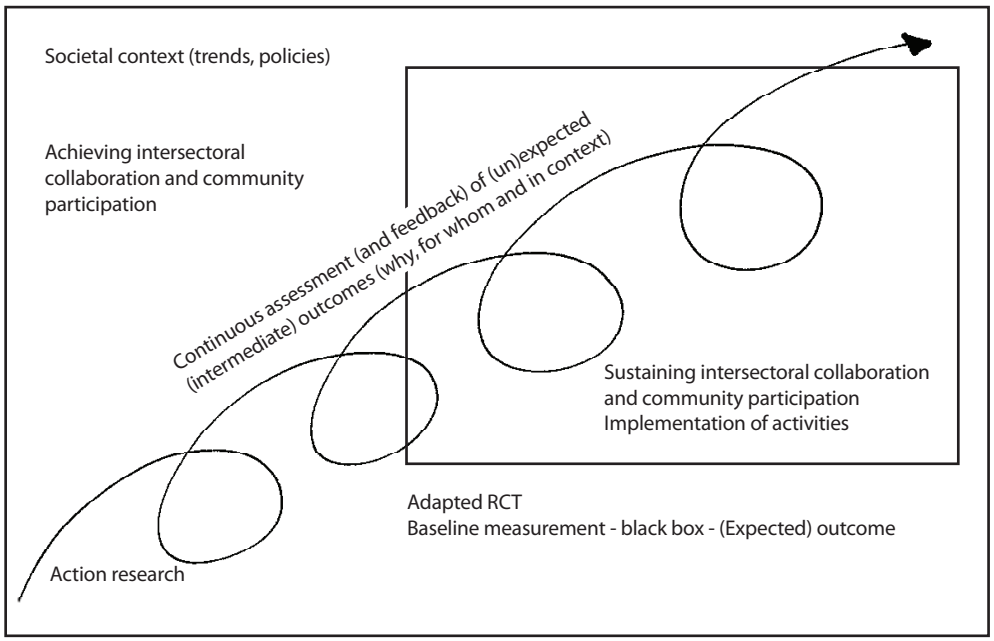


Figure 8.6 The combined contribution of action research and RCT for comprehensive evaluation of community programs.

cannot, without major revisions, yield valid, reliable, and generalizable findings (Wolff, 2000). The challenge for RCT in community health promotion is how far out of control a randomized controlled trial can be (Hawe et al., 2004). The moment at which an RCT is implemented, the usability, the processes, and the preconditions need to be considered critically and documented, as well as the implications for implementation (Saan and De Haes, 2005; Tang et al., 2003). Features of good trial design in community health programs are the selection of research questions and outcome measures that reflect the concerns of stakeholders, the collection of process data, and procedures for analysis that combine processes and outcomes (Oakley, 2005).

In action research, the interest centers on feedback, processes, initial and intermediate outcomes and thus reveals what happens in the black box. Action research continually takes place in an evolving and unpredictable way as depicted by the swirling, upward line. The contribution of action research is that it continually optimizes knowledge and processes while the program is running. As a result, more insight is gained into the factors and processes that contribute to the success (or failure) of a program.

The combination of RCT and action research produces a more usable, comprehensive, and accurate assessment. The research approaches are complementary to each other, as each has its own strengths or assets (and shortcomings or deficits),

and combination leads to a richer understanding of what promotes health. It is recommended that the research paradigm to support an integral research approach combine:

- Deficit and asset models
- Adapted RCT and action research
- Qualitative and quantitative methods and techniques
- Small-scale – large-scale results
- Feedback, processes, intermediate outcomes, and (eventual) outcomes
- Individual level and community level
- Health-related outcomes – principle-related outcomes – outcomes in other domains
- Control and context
- Facilitation and evaluation
- Lay knowledge and professional knowledge
- Steering and learning.

A research paradigm that includes these elements will be appropriate to measure full and ancillary participation results, the effects of multiple topics, and principle-based programs, and will use evolving theories such as systems thinking.

The main strategy to develop further integral research approaches and to build a healthy research paradigm is that researchers from different disciplines learn to cooperate and generate actionable knowledge in evaluating community health promotion. The idea of integrating or mixing methods has been mooted before and is accompanied by challenges such as the hierarchy of methods, the optimum mix of methods, and the relation between qualitative and quantitative data (Adamson, 2005; Dixon-Woods et al., 2004; Greene et al., 2001; Saan and De Haes, 2005). The consequences for researchers are that they broaden their research repertoire and reconnoiter new ways of facilitating and evaluating community health promotion. Therefore, multi- or trans-disciplinary teams are needed (Saan and de Haes, 2005). Collaboration with professionals from other disciplines and community members is for many a new way of working. Initially, researchers may feel resistance and uncertainty because of losing control over the research. But once researchers have experience of working collaboratively, involvement may become part of the research paradigm (Thompson et al., 2009).

Thus, the development of a healthy research paradigm is a learning process. As researchers expect different sectors, professionals, and community members to collaborate in health promotion, researchers from different disciplines should do the same themselves and start building an adequate research paradigm.

Principle-based programs

In principle-based programs, the latent potential of participation may be clear, but to date has not been fully harnessed. It has been shown in this thesis that participation can be made manageable by adopting systematic learning processes and that professionals require a broad range of competencies to facilitate and capture the full benefits of an

intervention. The implications of principle-based health promotion for professionals are (see also Saan and De Haes, 2005):

- Collaborate more close with researchers, policymakers and community members
- Monitor processes and outcomes continually
- Use action research methods and tools
- Make active use of research results and the principles of appreciative inquiry
- Use research activities to stimulate and evaluate participation
- Continuously communicate, provide feedback, stimulate discussion
- Stimulate learning processes and (self-)reflection
- Address points to improve immediately and celebrate successes.

The health professional in principle-based programs is not only an expert, but also an advisor, a strategist, an entrepreneur, and a stage manager of collaborations. This means in practice that theoretical learning should be complemented by action so that professionals have the chance to learn.

To acquire the competencies needed, the concept of action learning (Argyris and Schön, 1996) may be usable also in the education and on-the-job training of health professionals. At the lower level (single-loop), professionals learn to detect mistakes and strengths and, on the higher level, professionals learn to discuss and reflect on their norms and assumptions. In the end, action learning increases control over people's own actions, and this seamlessly fits the aim of health promotion.

Key actions to provide directions for enhancing the academic preparation of health promotion practitioners include dialogue (involving key stakeholders) about competencies, standards, and quality assurance (The Galway Consensus Conference Statement, 2008).

Supportive policies

Principle-based community health programs are a relatively new avenue for promoting health among the public that fits with current Dutch policy in which participation is high on the agenda. The neighborhood is recognized as a setting in which to promote health (Ministerie van VWS, 2003), municipalities are required to develop and implement local health policies (Ministerie van VWS, 2006), and people's responsibility for their own health and participation of all citizens in all facets of society is emphasized by the Social Support Act (Ministerie van VWS, 2007). The current policy stream supports participation by legislation, but current policies retard the development of principle-based health promotion and its evaluation for several reasons: governments aim to centrally steer (pre-packaged) programs; journals favor quantitative papers; higher education establishments teach mainly expert knowledge; funding agencies subsidize projects that address a pre-set (single) health topic; universities set (quantitative-oriented) tenure tracks, and organizations plan protocol-based and time-bound programs.

Government legislation has paved the way to foster participation and community health programs, but organizational policy has still to follow; this, however, is not exceptional when new legislation is introduced.

To harvest and capture the full effects of principle-based interventions, the characteristics of principle-based health promotion must be acknowledged: effects, learning process and costs.

The use of principle-based interventions has implications for the way in which an intervention's effects are captured. This includes allowing longer timeframes for follow up in recognition of the fact that change in complex systems happens non-linearly, i.e., there may be long periods when little appears to be happening and then suddenly large changes can occur (Hawe et al., 2009).

Principle-based health promotion is in its essence a learning process. Individuals and organizations learn and innovate when they participate actively in learning processes and experiment in the real world. Learning processes need to be facilitated rather than steered as in the traditional health education. Control needs to be relaxed as stakeholders and communities need to acquire competencies to control and improve their health themselves and to cope with the challenges of living. As learning processes need time, investment in health promotion is not short term, but rather spans a number of years and requires a flexible budget. To support learning processes, governments and organizations must 'plan for not having a plan' (Norris et al., 2008); this requires flexibility, decision-making skills, and trust.

The required capacity and time in principle-based health promotion may seem costly, but this can be questioned for a number of reasons, at least when action research is applied. Action research is probably much cheaper than RCT-like approaches. Research activities can be seen (and financed) as part of the intervention as action research contributes directly to realizing program objectives. The benefits of principle-based health programs may be much larger than presently known (e.g. the ancillary results of participation in multiple domains). The *Nairobi Call to Action for Closing the Implementation Gap in Health Promotion* (WHO, 2009) states that health promotion is the most cost-effective strategy to improve health and quality of life.

Box 8.3 summarizes the recommendations based on this thesis and other authors (e.g. Cargo and Mercer, 2008; Laverack, 2009; Green et al., 2009a, 2009b; Saan and De Haes, 2005).

The most essential factor probably is that policymakers at all levels and in all organizations periodically ask themselves what they have learned so far, and use the answers to adjust future policies (double-loop learning).

In sum…

In this thesis the core principles of health promotion, participation and collaboration, have been operationalized into variables and indicators, theory in relation to both action research and health promotion has been developed, and guidelines to facilitate and evaluate community health promotion programs are provided for science, practice, and policy (see Figure 8.7).

Box 8.3 Recommendations for policy

Local and national governments and funding agencies:

- Include principle-based interventions in certification schemes. As the CHL is already aware (Van Dale et al., 2008), the Centre can have a key role in bringing together practice, research, and policy that supports the development and use of principle-based programs in combination with pre-packaged programs.
- Emphasize control by stakeholders, local evaluation, and self-monitoring.
- Reallocate or create budget and capacity for integrated research activities in community health promotion.
- Stimulate research that captures and assesses the full results of principle-based programs in health and in other domains, including cost-effectiveness.
- View action research approaches as also part of the intervention.
- Call specifically for action research in community health promotion.

Journals:

- Promote the publication of qualitative research papers.
- Include external validity in the publication criteria.
- Stimulate systematic reviews of action research in community health promotion.
- Establish new specialized journals on action research and/or community health promotion.

Universities and higher education establishments:

- Give more weight to community and practice-based research in academic promotion and tenure criteria.
- Train students and fellows in methods of practice-based and participatory research.
- Train students and fellows in competencies such as social skills, communication, and conflict management.
- Stimulate the use of multiple methods in the facilitation and evaluation of community health promotion.
- Stimulate multi-disciplinary research.

Organizations:

- Allow flexible planning over longer time spans.
- Stimulate the use of action approaches.

In essence, health promotion can be tremendously advanced by the combination of the old and new research paradigm into a healthy research paradigm that encompasses multiple research approaches, by the use of both pre-packaged and principle-based programs, and by policies that support community health promotion and its evaluation.

Participation and collaboration are – once again – the moderators through which researchers, practitioners, and policy makers can realize the proposed future. All have an interest in better research, better programs, and appropriate policies that contribute to health. After all, for all stakeholders, participating is healthy.

Figure 8.7 Future directions in health promotion.

References

Abbema, E., Van Assema, P., Kok, G.J., De Leeuw, E. and Vries, N.K. (2004). Effect evaluation of a comprehensive community intervention aimed at reducing socioeconomic health inequalities. *Health Promotion International*, 19(2): 141-156.

Adamson, J. (2005). Combined quantitative and qualitative designs. In: Bowling, A. and Ebrahim, S. *Handbook of health research methods. Investigation, measurement and analysis*. New York: Open University Press, 230-245.

Allison, K.R. and Rootman, I. (1996). Scientific rigor and community participation in health promotion research: are they compatible? *Health Promotion International*, 11(4): 333-340.

Alting, D.E.M., Bouwen, J.G.M. and Keijsers, J.F.E.M. (2003a). Adviesdocument. In het kader van het project '*Overzicht en advisering over onderzoeksmethoden en meetinstrumenten voor de evaluatie van interventies die zijn opgezet vanuit de principes van de community benadering*' [Advisory document for the project 'Overview of and advice about research methods and measurement tools to evaluate community-based interventions']. Woerden (the Netherlands): NIGZ/Centrum voor Review & Implementatie.

Alting, D.E.M., Bouwen, J.G.M. and Keijsers, J.F.E.M. (2003b). *Het evalueren van community interventies*. Resultaten en conclusies van een reviewstudie naar onderzoeksmethoden en meetinstrumenten [Evaluation of community interventions. Results and conclusions of a review study to research methods and measurement tools]. Woerden (the Netherlands): NIGZ/Centrum voor Review & Implementatie.

Altman, D.G., Endres, J., Lorig, K., Howard-Pitney, B. and Rogers, T. (1991). Obstacles to and future goals of ten comprehensive community health promotion projects. *Journal of Community Health*, 16(6): 299-314.

Andersson, C.M., Bjäras, G., Tillgren, P. and Östenson, C.G. (2005). A longitudinal assessment of intersectoral participation in a community-based diabetes prevention programme. *Social Science & Medicine*, 61(11): 2407-2422.

Anderson, L.M., Scrimshaw, S.C., Fullilove, M.T., Fielding, J.E. and Task force on community preventive services (2003). The community guide's model for linking the social environment to health. *American Journal of Preventive Health*, 24(S3): 12-20.

Antonovsky, A. (1979). *Health, stress and coping*. San Francisco: Jossey-Bass.

Antonovsky, A. (1987). *Unravelling the mystery of health. How people manage stress and stay well*. San Francisco: Jossey-Bass.

Antonovsky, A. (1996). *The salutogenic model as a theory to guide health promotion*. Health Promotion International, 11(1): 11-18.

Argyris, C. (1976). Single-loop and double-loop models in research on decision making. *Administrative Science Quarterly*, 21(3): 363-375.

Argyris, C. and Schön, D. (1996). *Organizational learning II: Theory, method and practice*. Reading, Massachusetts: Addison Wesley.

Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Planning Association*, 35(4): 216-224.

Barnett, E. and Casper, M. (2001). A definition of "social environment". *American Journal of Public Health*, 91(3): 465.

Barras, C.D.J., Bloom, N., Cook, S.L., Luzhansky, Z.J. and Skinner, B.S. (1996). Hand in Hand: Encouragement and facilitation of support and self-help group use. *Internet Journal of Health Promotion*, http://rhpeo.net/ijhp-articles/1996/5/index.htm.

Bauer, G., Davies, J.K., Pelikan, J. and on behalf of the EUHPID theory working group and the EUHPID Consortium (2006). The EUHPID health development model for the classification of public health indicators. *Health Promotion International*, 21(2): 153-159.

Baum, F., Sanderson, C. and Jolley, G. (1997). Community participation in action: an analysis of the South Australian health and social welfare councils. *Health Promotion International*, 12(2): 125-134.

Beaulieu, L.J. (2002). *Mapping the assets of your community: A key component for building local capacity.* Civic engagement: southern rural development center series No. 227. http://srdc.msstate.edu/publications/227/227_asset_mapping.pdf. Accessed 08.01.08.

Berendsen, A.J., Benneker, W.H.G.M., Meyboom-de Jong, B., Klazinga, N.S. and Schuling, J. (2007). Motives and preferences of general practitioners for new collaboration models with medical specialists: a qualitative study. *BMC Health Services Research*, 7(4).

Berkeley, D. and Springett, J. (2006). From rhetoric to reality: Barriers faced by health for all initiatives. *Social Science & Medicine*, 63(1): 179-188.

Berkman, L.F. and Glass, T. (2000). Social integration, social networks, social support and health. In: Berkman, L.F. and Kawachi, I. (Eds.). *Social epidemiology*. New York: Oxford University Press, 137-173.

Berkman, L.F., Glass, T., Brissette, I. and Seeman, T.E. (2000). From social integration to health: Durkheim in the new millennium. *Social Science & Medicine*, 51(9): 843-857.

Bowen, S. and Martens, P.J. (2006). A model for collaborative evaluation of university-community partnerships. *Journal of Epidemiology and Community Health*, 60(10):902-907.

Bracht, N. (1990). *Health promotion at the community level*. London: Sage publications.

Breslow, L. (1999). From disease prevention to health promotion. *JAMA*, 281(11): 1030-1033.

Bushe, G.R. (2001). Five theories of change embedded in appreciative inquiry. In: Cooperrider, D. Sorenson, P., Whitney, D. and Yeager, T. (Eds.). *Appreciative inquiry: An emerging direction for organization development.* Champaign, IL: Stipes, 117-127.

Butterfoss, F.D. (2006). Process evaluation for community participation. *Annual Review of Public Health*, 27: 323-340.

Butterfoss, F.D., Goodman, R.M. and Wandersman, A. (1993). Community coalitions for prevention and health promotion. *Health Education Research*, 8(3): 315-330.

Butterfoss, F.D., Goodman, R.M. and Wandersman, A. (1996). Community coalitions for prevention nd health promotion: Factors predicting satisfaction, participation, planning. *Health Education Quarterly*, 23(1): 65-79.

Camprostini, S. (2007). Measurement and effectiveness. Methodological considerations, issues and possible solutions. In: McQueen, D.V. and Jones, C.M. (Eds.). *Global perspectives on health promotion effectiveness*. New York: Springer: 305-325.

Cargo, M. and Mercer, S.L. (2008). The value and challenges of participatory research: strengthening its practice. *Annual Review of Public Health*, 29: 325-350.

Cashman, S.B, Adeky, S., Allen, A.J., Corburn, J., Israel, B.A., Montaño, J. et al. (2008). The power and the promise: Working with communities to analyze data, interpret findings, and get to outcomes. *American Journal of Public Health*, 98(8): 1407-1417.

Clark, N.M., Baker, E.A., Chawla, A. and Maru, M. (1993). Sustaining collaborative problem solving: Strategies from a study in six Asian countries. *Health Education Research*, 8(3): 385-402.

Cramer, M.E., Atwood, J.R. and Stoner, J.A. (2006). A conceptual model for understanding effective coalitions involved in health promotion programming. *Public Health Nursing*, 23(1): 67-73.

Cohen, D.J. and Crabtree B.F. (2008). Evaluative criteria for qualitative research in health care: controversies and recommendations. *Annals of Family Medicine*, 6(4): 331-339.

Cook, W.K. (2008). Integrating research and action: a systematic review of community-based participatory research to address health disparities in environmental and occupational health in the USA. *Journal of Epidemiology and Community Health*, 62(8): 668-676.

Coombes, Y. (2000). Combining quantitative and qualitative approaches to evaluation. In: Thorogood, M. and Coombes, Y. (Eds.). *Evaluating health promotion: practice and methods*. New York: Oxford University Press, 27-40.

Cooperrider, D.L. and Srivastva, S. (1987). Appreciative inquiry in organizational life. *Research in organizational change and development*, 1: 129-169.

Cooperrider, D.L., Whitney, D. and Stavros, J.M. (2005). *Appreciative inquiry handbook. The First in a series of AI workbooks for leaders of change*. US: Crown Custom Publishing, Inc.

Cornelisse-Vermaat, J.R. and Maassen van den Brink, H. (2007). Ethnic differences in lifestyle and overweight in the Netherlands. *Obesity*, 15(2): 483-493.

De Haes, W.F.M., Voorham, A.J.J. and Mackenbach, J.P. (2002). Wijkgericht werken aan gezondheidsbevordering in vier achterstandswijken in Rotterdam. Opzet, uitgangspunten en beschrijving van het proces [Health promotion at the neighbourhood level in four deprival areas in Rotterdam. Framework, starting points and course of action]. *Tijdschrift voor Gezondheidswetenschappen*, 7: 425-430

De Koning, K. and Martin, M. (Eds.) (1996). *Participatory research in health. Issues and experiences*. South Africa: Zed Books Ltd Johannesburg.

De Savigny, D. and Adam, T., (Eds.) (2009). *Systems thinking for health systems strengthening. Alliance for health policy and systems research*. World Health Organization.

Dekker, P. and De Hart, J. (2009). *Vrijwilligerswerk in meervoud. Civil society en vrijwilligerswerk* [Voluntary work: a diversity of forms]. Den Haag, Sociaal en Cultureel Planbureau.

DiClemente, C.C., Marinilli, A.S., Singh, M. and Bellino, L.E. (2001). The role of feedback in the process of health behavior change. *American Journal of Health Behavior*, 25(3): 217-27.

Dijkema, P. (2007a). *Actiebegeleidend onderzoek in Lakerlopen 2007; opzet en eerste procesbeschrijving* [Action research in Lakerlopen 2007: Development and first description of the process]. Eindhoven (the Netherlands): GGD Eindhoven.

Dijkema, P. (2007b). *Ervaringen met de 'Checklist werkgroep Hart voor Lakerlopen'*. [Experiences with the Checklist in the workgroup 'Hart voor Lakerlopen']. Eindhoven (The Netherlands): GGD Eindhoven.

Dijkema, P. and Spijkers, K. (2009). *Hoe Gezond in de buurt versterken? Verslag van een onderzoekstraject met acht wijkcoördinatoren ter versterking van het project en specifiek de intersectorale samenwerking*. [How to strengthen Health in the neighborhood? Report on the research trajectory to strengthen the project and specifically intersectoral collaboration with eight coordinators in the neighborhood]. Eindhoven, GGD Brabant-Zuidoost.

Dijkshoorn, H., Uitenbroek, D.G. and Middelkoop, B.J. (2003). Prevalentie van diabetes mellitus en hart- en vaatziekten onder Turkse, Marokkaanse en autochtone Nederlanders [Prevalence of diabetes mellitus and cardiovascular disease among immigrants from Turkey and Morocco and the indigenous population]. *Nederlands Tijdschrift voor Geneeskunde*, 147(28): 1362-1366.

Dixon-Woods, M., Agarwal, S., Young, B., Jones, D. and Sutton, A. (2004). *Integrative approaches to qualitative and quantitative evidence*. London: Health Development Agency.

Drach-Zahavy, A. and Baron-Epel, O. (2006). Health promotion teams' effectiveness: A structural perspective from Israel. *Health Promotion International*, 21(3): 181-190.

Drukker, M. (2004). *The Neighbourhood Matters. The neighbourhood social environment and differences in self-reported quality of life and mental health*. Dissertation. Maastricht (The Netherlands), University Press.

Ebbesen, L.S., Heath, S., Naylor, P.J. and Anderson, D. (2004). Issues in measuring health promotion capacity in Canada: A multi-province perspective. *Health Promotion International*, 19(1): 85-94.

Eden, C. and Huxham, C. (1996). Action research for management research. *British Journal of Management*, 7(1): 75-86.

Eindhoven Impuls. Eindhoven (the Netherlands): Gemeente Eindhoven, 2000.

El Ansari, W., Phillips, C.J. and Hammick, M. (2001). Collaboration and partnerships: Developing the evidence base. *Health and Social Care in the Community*, 9(4): 215-227.

Eriksson, M. and Lindström, B. (2008). A salutogenic interpretation of the Ottawa Charter. *Health Promotion International*, 23(2): 190-199.

Eyler, A.A., Brownson, R.C., Donatelle, R.J., King, A.C., Brown, D. and Sallis, J.F. (1999). Physical activity, social support and middle- and older-aged minority women: Results from a US survey. *Social Science & Medicine*, 49(6): 781-789.

Fawcett, S.B., Paine-Andrews, A., Francisco, V.T. and Schultz, J.A. (2000). A model memorandum of collaboration: A proposal. *Public Health Reports*, 115(2/3): 174-179.

Fawcett, S.B., Boothroyd, R., Schulz, J.A., Francisco, V.T., Carson, V. and Bremby, R. (2003). Building capacity for participatory evaluation within community initiatives. *Journal of Prevention & Intervention in the Community*, 26(2): 21-36.

Fielden, S.J., Rusch, M.L., Tabu Masinda, T., Sands, J., Frankish, J. and Evoy, B. (2007). Key considerations for logic model development in research partnerships: A Canadian case study. *Evaluation and Program Planning*, 30(2): 115-124.

Florin, P., Mitchell, R. and Stevenson, J. (1993). Identifying training and technical assistance needs in community coalitions: a developmental approach. *Health Education Research*, 8(30):417-432.

Florin, P., Mitchell, R., Stevenson, J. and Klein, I. (2000). Predicting intermediate outcomes for prevention coalitions: A developmental perspective. *Evaluation and Program Planning*, 23(3): 341-346.

Foster-Fishman, P.G., Berkowitz, S.L., Lounsbury, D.W., Jacobson, S. and Allen, N.A. (2001). Building collaborative capacity in community coalitions: A review and integrative framework. *American Journal of Community Psychology*, 29(2): 241-261.

Freudenberg, N. (2004). Community capacity for environmental health promotion: Determinants and implications for practice. *Health Education Behavior*, 31(4): 472-490.

Fries, J.F., Koop, C.E., Sokolov, J., Beadle, C.E. and Wright, D. (1998). Beyond health promotion: reducing need and demand for medical care: health care reforms to improve health while reducing costs. *Health Affairs*, 17(2): 70-84.

Gibbon, M. (2002). Doing a doctorate using a participatory action research framework in the context of community health. *Qualitative Health Research*, 12(4): 546-558.

Gilchrist, A. (2003). Community development and networking for health. In: Orme, J. Powell, J., Taylor, P., Harrison, T. and Grey, M. (Eds.). *Public Health for the 21st Century. New perspectives on policy, participation and practice*. Berkshire: Open University Press: 145-160.

Glasgow, R.E. and Emmons, K.M. (2007). How can we increase translation of research into practice? Types of evidence needed. *Annual Review of Public Health*, 28: 413-433.

Glass, T.A., Mendes De Leon, C.F., Bassuk, S.S. and Berkman, L.F. (2006). Social engagement and depressive symptoms in late life: Longitudinal findings. *Journal of Aging and Health*, 18(4): 604-628.

Goldman, K.D. and Schmalz, K.J. (2008). Being well-connected: Starting and maintaining successful partnerships. *Health Promotion Practice*, 9(1): 5-8.

Goodman, R.M., Wheeler, F.C. and Lee, P.R. (1995). Evaluation of the heart to heart project: Lessons from a community based chronic disease prevention project. *American Journal of Health Promotion*, 9(6): 443-455.

Goodman, R.M., Speers, M.A., McLeroy, K., Fawcett, S., Kegler, M.C., Parker, E. et al. (1998). Identifying and defining the dimensions of community capacity to provide a basis for measurement. *Health Education & Behavior*, 25(3): 258-278.

Goodstadt, M.S., Hyndman, B., McQueen, D.V., Potvin, L., Rootman, I. and Springett, J. (2001). Evaluation in health promotion: synthesis and recommendations. In: Rootman, I., Goodstadt, M., Hyndman, B., McQueen, D.V., Potvin, L., Springett, J. and Ziglio, E. (Eds.). *Evaluation in health promotion. Principles and perspectives*. Denmark: WHO Regional Publications, European Series, 92.

Goosen, S., Koelen, M., Langen, H., Berkouwer, L. and Schijndel, R. (2004). *Gezond AZC. Eindrapportage van een pilot project gericht op gezondheidsbevordering in de centrale opvang van asielzoekers* [Healthy asylum. Final report of a pilot project on health promotion for persons seeking asylum]. Utrecht: GGD Nederland, Landelijk Service Bureau MOA. Wageningen (the Netherlands): Leerstoelgroep Communicatie en Innovatiestudies Wageningen Universiteit.

Graham, K. and Bois, C. (1997). The complexity of roles in community action projects: the example of the evaluation of 'alternatives'. *Evaluation and Program Planning*, 20(4): 433-442.

Granner, M.L. and Sharpe, P.A. (2004). Evaluating community coalition characteristics and functioning: a summary of measurement tools. *Health Education Research*, 19(5): 514-532.

Grant, J., Nelson, G. and Mitchell, M. (2008). Negotiating the challenges of participatory action research: relationships, power, participation, change and credibility. In: Reason, P. and Bradbury, H. (Eds.). *Handbook of Action Research: Participative Inquiry and Practice*. Second edition. London: Sage Publications, 589-601.

Green, J. and Thorogood, N. (2004). *Qualitative methods for health research*. London: Sage Publications.

Green, L.W. (2001). From research to 'best practices' in other settings and populations. *American Journal of Health Behavior*, 25(3):165-178.

Green, L.W. (2006). Public health asks of systems science: to advance our evidence-based practice, can you help us get more practice-based evidence? Commentaries. *American Journal of Public Health*, 96(3): 406-409.

Green, L.W. and Kreuter, J.W. (1991). *Health promotion planning*. Palo Alto: Mayfield Publishing Company.

Green, L.W. and Mercer, S.L. (2001). Can public health researchers and agencies reconcile the push from funding bodies and the pull from communities? Community-based participatory research. *American Journal of Public Health*, 91(12): 1926-1929.

Green, L.W. and Kreuter, M.W. (2005). *Health promotion planning. An educational and ecological approach*. Fourth edition. New York: McGraw-Hill.

Green, L.W. and Glasgow, R.E. (2006). Evaluating the relevance, generalization, and applicability of research: issues in external validation and translation methodology. *Evaluation & The Health Professions*, 29(1): 126-153.

Green, L.W., Daniel, M. and Novick. L. (2001). Partnerships and coalitions for community-based research. *Public Health Reports*, 116(suppl. 1): 20-31.

Green, L.W., Glasgow, R.E., Atkins, D. and Stange, K. (2009a). Making evidence from research more relevant, useful and actionable in policy, program planning and practice. Slips "Twixt cup and lip". Commentary. *American Journal of Preventive Medicine*, 37(6S1): S187-S191.

Green, L.W., Ottoson, J.M., Garcia, C. and Hiatt, R.A. (2009b). Diffusion theory and knowledge emanation, utilization, and integration in public health. *Annual Review of Public Health*, 30: 151-74.

Greene, J.C., Benjamin, L. and Goodyear, L., (2001). The merits of mixing methods in evaluation. *Evaluation*, 7(1): 25-44.

Greenwood, D.J. and Levin, M. (2007). *Introduction to action research. Social research for social change*. Second edition. London: Sage Publications.

Guldan, G.S. (1996). Obstacles to community health promotion. *Social Science & Medicine*, 43(5): 689-695.

Gustavsen, B. (2003). New forms of knowledge production and the role of action research. *Action Research*, 1(2): 153-164.

Harper, S.R. and Kuh, G.D. (2007). Myths and misconceptions about using qualitative methods in assessment. In: Harper, S.R. and Museus, S.D. (Eds.), *Using qualitative methods in institutional assessment. New directions for institutional research* (No. 136). San Francisco: Jossey-Bass, 5-14.

Hart, E. and Bond, M. (1995). *Action research for health and social care*. Buckingham: Open University Press.

Harting, J. and Van Assema, P. (2007). *Community-projecten in Nederland. De eeuwige belofte?* [Community programs in the Netherlands. The everlasting promise?] Maastricht (The Netherlands): Universiteit Maastricht.

Hays, C.E., Hays, S.P., De Ville, J.O. and Mulhall, P.F. (2000). Capacity for effectiveness: The relationship between coalition structure and community impact. *Evaluation and Program Planning*, 23(3): 373-379.

Hawe, P. and Shiell, A. (2000). Social capital and health promotion: A review. *Social Science & Medicine*, 51(6): 871-885.

Hawe, P., Shiell, A. and Riley, T. (2004). Complex interventions: How far 'out of control' should a randomized controlled trial be? *British Medical Journal*, 328, 1561-1563.

Hawe, P., Shiell, A. and Riley, T. (2009). Theorizing interventions as events in systems. *American Journal of Community Psychology*, 43: 267-276.

Heaney, C.A. and Israel, B.A. (2002). Social networks and social support. In: Glanz, K., Rimer, B.K., and Lewis, F.M. (Eds.). *Health behavior and health education theory, research, and practice*. Third edition. San Francisco: Jossey-Bass, 185-209.

Helmfrid, H., Haden, A. and Jung, M. (2008). The role of action research in environmental research: learning from a local organic food and farming research project. *Systemic Practice and Action Research*, 21(2): 105-131.

Heron, J. and Reason, P. (1997). A participatory inquiry paradigm. *Qualitative Inquiry*, 3(3): 274-294.

Horstman, K. and Houtepen, R. (2005). *Worstelen met gezond leven* [Wrestling with a healthy lifestyle]. Amsterdam, Het Spinhuis.

Hughes, F. (2008). Action research in health care. In: Reason, P. and Bradbury, H. (Eds.). *Handbook of Action Research: Participative Inquiry and Practice*. Second edition. London: Sage Publications, 381-393.

Israel, B.A., Cummings, K.M., Dignan, M.B., Heaney, C.A., Perales, D.P., Simons-Morton, B.G. and Zimmermann, M.A. (1995). Evaluation of health education projects: Current assessment and future directions. *Health Education Quarterly*, 22: 364-389.

Israel, B.A., Schulz, A.J., Parker, E.A. and Becker, A.B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health*, 19: 173-202.

Israel, B.A., Eng, E., Schulz, A.J. and Parker, E.A. (Eds.) (2005). *Methods in community-based participatory research for health*. San Francisco: Jossey-Bass.

Jackson, S.F., Perkins, F., Khandor, E., Cordwell, L., Hamann, S. and Buasai, S. (2007). Integrated health promotion strategies: A contribution to tackling current future health challenges. *Health Promotion International*, 21(S1): 75-83.

Judd, J., Frankish, C.J. and Moulton, G. (2001). Setting standards in the evaluation of community based health promotion programmes – A unifying approach. *Health Promotion International*, 16(4): 367-380.

Kahn, E.B., Ramsey, L.T., Brownson, R.C., Heath, G.W., Howze, E.H., Powell, K.E. et al. (2002). The effectiveness of interventions to increase physical activity. A systematic review. *American Journal of Preventive Medicine*, 22(Suppl. 4): 73-107.

Kaplan, S. and Garrett, K. (2005). The use of logic models by community-based initiatives. *Evaluation and Program Planning*, 28(2): 167-172.

Kawachi, I. and Berkman, L. (2000). Social cohesion, social capital, and health. In: Berkman, L.F., and Kawachi, I. (Eds.). *Social epidemiology*. New York: Oxford University Press, 174-190.

Kawachi, I., Kim, D., Coutts, A. and Subramanian, S.V (2004). Commentary: Reconciling the three accounts of social capital. *International Journal of Epidemiology*, 33(4): 682-690.

Kegler, M., Steckler, A., McLeroy, K. and Herndon Malek, S. (1998). Factors that contribute to effective community health promotion coalitions: A study of 10 Project ASSIST coalitions in North Carolina. *Health Education and Behavior*, 25(3): 338-353.

Kelly, C.M., Hoehner, C.M., Baker, E.A., Brennan Ramirez, L.K. and Brownson, R.C. (2006). Promoting physical activity in communities: Approaches for successful evaluations of programs and policies. *Evaluation and Program Planning*, 29(3): 280-292.

Kemm, J. (2006). The limitations of 'evidence-based' public health. *Journal of Evaluation in Clinical Practice*, 12(3): 319-324.

Kemmis, S. and Taggart, R. (1982). *The action research planner* (3rd ed.). Geelong, Australia: Deakin University Press.

Kickbush, I. (1986). Health promotion: a global perspective. *Canadian Journal of Public Health*, 77(5):321-326.

Kloek, G.C. (2004). *Improving health related behavior in deprived neighborhoods*. Thesis Erasmus MC. Rotterdam (the Netherlands): University Medical Center Rotterdam.

Kloek, G.C., Van Lenthe, F.J., Van Nierop, P.W.M., Koelen, M.A. and Mackenbach, J.P. (2006). Impact evaluation of a Dutch community intervention to improve health-realted behaviour in deprived neighbourhoods. *Health & Place*, 12(4): 665-677.

Koelen, M.A. (2000). *Evaluation of SUPER: The European food and shopping research*. Research Report. Wageningen (the Netherlands): Wageningen Universiteit, Leerstoelgroep Communicatie en Innovatie Studies.

Koelen, M.A. and Brouwers, T. (1990). Knowledge systems and public health. *Knowledge, Technology & Policy*, 3(3): 50-57.

Koelen, M.A. and Lindström, B. (2005). Making healthy choices the easy choices: the role of empowerment. *European Journal of Clinical Nutrition*, 59(Suppl 1): S10-S16.

Koelen, M.A. and Vaandrager, H.W. (1999). Communicatieve veranderingsprocessen en onderzoek [Communicative change processes and research]. In: Van Woerkum, C.M.J. and Van Meegeren, P. (Eds.). *Basisboek communicatie en verandering*. Amsterdam: Boom, 282-302.

Koelen, M.A. and Van den Ban, A.W. (2004). *Health education and health promotion*. Wageningen (the Netherlands): Wageningen Academic Publishers.

Koelen, M.A., Vaandrager, L. and Colomer, C. (2001). Health promotion: dilemmas and challenges. *Journal of Epidemiology and Community Health*, 55(4): 257-262.

Koelen, M.A., Vaandrager, L. and Wagemakers, A. (2008). What is needed for coordinated action for health? *Family Practice*, 25(S1): i25-i31.

Kolb, D. (1984). *Experimental learning: Experience as the source of learning and development*. USA, Englewood Cliffs: Prentice-Hall.

Kooiker, S. and Van der Velden, K. (2007). *Een nuchtere kijk op gezond gedrag*. [A sober view on healthy behavior]. Sociaal en Cultureel Planbureau, Dan Haag.

Kreuter, M., Farrell, D., Olevitch, L. and Brennan, L. (2000). *Tailoring health messages: Customizing communication with computer technology*. Mahwah, New Jersey: Lawrence Erlbaum.

Kreuter, M.W., Lezin, N.A. and Young, L.A. (2000). Evaluating community-based collaborative mechanism: Implications for practitioners. *Health Promotion Practice*, 1(1): 49-63.

Krieger, N. (2001). A glossary for social epidemiology. *Journal of Epidemiology and Community Health*, 55(10): 693-700.

Lalonde, M. (1974). *A new perspective on the health of Canadians: a working document*. Ottawa: Ministry of National Health and Welfare.

Laverack, G. (2009). *Public health. Power, empowerment and professional practice*. Second edition. UK: Palgrave Macmillan.

Laverack, G. and Labonte, R. (2000). A Planning framework for community empowerment goals within health promotion. *Health Policy & Planning*, 15(3): 255-262.

Laverack, G. and Wallerstein, N. (2001). Measuring community empowerment: a fresh look at organizational domains. *Health promotion international*, 16(2): 179-185.

Leibbrand, K., Boonstra, J. and Zomer, K. (2007). *Organisatie & Netwerk; organisatieontwikkeling in gezondheidsbevordering* [Organisation and Network; organisation development in health promotion]. Twente (the Netherlands): GGD Regio Twente in samenwerking met NIKOS, Universiteit Twente.

Leeuwis, C. (2004). *Communication for rural innovation. Rethinking agricultural extension*. Oxford: Blackwell Science Ltd.

Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*, 2(4): 34-46.

Lincoln, Y.S. and Guba, E.G. (1985). *Naturalistic inquiry*. USA, Beverly Hills, CA: Sage Publications.

Lindström, B. and Eriksson, M. (2006). Contextualising salutogenesis and Antonovsky in public health development. *Health Promotion International*, 21(3): 238-244.

Lindström, B. and Eriksson, M. (2009). The salutogenic approach to the making of HiAP/healthy public policy: illustrated as a case study. *Global Health Promotion*, 16(1): 17-28.

List, D (2006). Action research cycles for multiple futures perspectives. *Futures*, 38(6): 673-684.

Litva, A., Coast, J., Donovan, J., Eyles, J., Shepherd, M., Tacchi, J., Abelson, J. and Morgan, K. (2002). 'The public is too subjective': public involvement at different levels of health-care decision making. *Social Science & Medicine*, 54(12):1825-1837.

Ludema, J.D. and Fry, R.E. (2008). In: Reason, P. and Bradbury, H. (Eds.). *Handbook of action research: Participative inquiry and practice*. Second edition. London: Sage Publications, 280-296.

MacDonald, M. and Mullet, J. (2008). Dilemmas in health promotion evaluation: participation and empowerment. In: Potvin, L and McQueen, D.V. (Eds.). *Health promotion practices in the Americas. Values and research*. New York: Springer, 149-178.

Mackenbach, J.P. and Bakker, M.J. (2003). European network on interventions and policies to reduce inequalities in health. *The Lancet*, 362(9393):1409-1414.

Mackenbach, J.P. and Stronks, K. (2002). A strategy for tackling health inequalities in the Netherlands. *British Medical Journal*, 325:1029-1032.

Mackewn, J. (2008). Facilitation as action research in the moment. In: Reason, P. and Bradbury, H. (Eds.). *Handbook of action research: participative inquiry and practice*. Second edition. London: Sage Publications, 615-628.

Marmot, M. (2005). The social environment and health. College lectures. *Clinical Medicine*, 5(3): 244-248.

Marmot, M. (2006). Health in an unequal world – social circumstances, biology and disease. *The Lancet*, 368(9552): 2081-2094

Marmot, M. (2007). Achieving health equity: From root causes to fair outcomes. *The Lancet*, 29(9593): 1153-1163.

McLean, S., Feather, J. and Butler-Jones, D. (2005). *Building health promotion capacity: Action for Learning, Learning from Action*. Vancouver: UBC Press.

Maclellan-Wright, M.F., Anderson, D., Barber, S., Smith, N., Cantin, B., Felis, R. et al. (2007). The development of measures of community capacity for community-based funding programs in Canada. *Health Promotion International*, 22(4): 299-306.

McNeill, L.H., Kreuter, M.W. and Subramanian, S.V. (2006). Social environment and physical activity: A review of concepts and evidence. *Social Science & Medicine*, 63(4):1011-1022.

McQueen, D.V. (2007). Critical issues in theory for health promotion. In: McQueen, D.V. and Kickbush, I. (Eds.). *Health and modernity. The role of theory in health promotion*. New York: Springer, 21-42.

McQueen, D.V. and Jones, C.M. (2007). Global perspectives on health promotion effectiveness: An introduction. In: McQueen, D.V. and Jones, C.M. (Eds.). *Global perspectives on health promotion effectiveness*. New York: Springer: 3-11.

McQueen, D.V. and Kickbush, I. (2007). *Health and modernity. The role of theory in health promotion*. New York: Springer.

Mead, G. (2008). Muddling through: facing the challenges of managing a large-scale action research project. In: Reason, P. Bradbury, H. (Eds.). *Handbook of action research: participative inquiry and practice*. Second edition. London: Sage Publications, 629-642.

Mechanic, D. (1999). Issues in promoting health. *Social Science & Medicine*, 48(6):711-718.

Meijboom, B., De Haan, J. and Verheijen, P. (2004). Networks for integrated care provision: an economic approach based on opportunism and trust. *Health Policy*, 69(1): 33-43.

Melander-Wikman, A., Jansson, M. and Ghaye, T. (2006). Reflections on an appreciative approach to empowering elderly people, in home healthcare. *Reflective Practice*, 7(4): 423-44.

Mendes, R. and Akerma, M. (2002). The challenge of project evaluation. In: Van Naerssen, T. and Barten, F. (Eds.). *Healthy Cities in developing countries: Lessons to be learned*. Saarbrücken (Germany): Verlag für Entwicklungspolitik Saarbrücken.

Mendes de Leon, C.F., Glass, T. and Berkman, L. (2003). Social engagement and disability in a community population of older adults. *American Journal of Epidemiology*, 157(7): 633-642.

Merzel, C. and D'Afflitti, J. (2003). Reconsidering community-based health promotion: Promise, performance, and potential. *American Journal of Public Health*, 93(4):557-74.

Metzler, M., Amuyunzu-Nyamongo, M., Mukhopadhyay, A. and De Salazar, L. (2007). Community interventions on social determinants of health: Focusing the evidence. In: McQueen, D.V. and Jones, C.M. (Eds.), *Global perspectives on health promotion effectiveness*. New York: Springer, 225-245.

Michael S. (2005). The promise of appreciative inquiry as an interview tool for field research. *Development in Practice*, 15(2):222-230.

Milio, N. (1997). Forging social responsibility in the world of the marketplace: moving governments to be modellers, market shapers and innovators. In: Bouman, L.I., Boonekamp, G.M.M. and Koelen, M.A. (Eds.). *Proceedings of the international conference on health promotion and nutrition, organised by the European super-project team in collaboration with the WHO Healthy Cities Project*. Wageningen (The Netherlands): Wageningen Agricultural University.

Ministerie van VWS (2003). *Kabinetsnota Langer gezond leven. Ook een kwestie van gezond gedrag* [Policy document. Living longer healthy. A mather of healthy behaviour]. Den Haag (the Netherlands): Ministerie van Volksgezondheid, Welzijn en Sport.

Ministerie van VWS (2006). *Kabinetsnota Kiezen voor gezond leven* [Policy document. Opting for a healthy life]. Den Haag (the Netherlands): Ministerie van Volkgezondheid, Welzijn en Sport.

Ministerie van VWS (2007). *Wet maatschappelijke ondersteuning, Wmo*. [Social Support Act.] Den Haag (the Netherlands): Ministerie van Volksgezondheid, Welzijn en Sport.

Minkler, M. and Baden, A.C. (2008). Impacts of CBPR on academic researchers, research quality and methodology, and power relations. In: Minkler M and Wallerstein N (Eds.). *Community-based participatory research for health. From process to outcomes*. Second edition. San Francisco: Jossey-Bass, 243-261.

Minkler, M. and Wallerstein, N. (Eds.) (2003). *Community-based participatory research for health*. San Francisco: Jossey-Bass.

Minkler, M. and Wallerstein, N. (2008). *Community-based participatory research for health. From process to outcomes*. Second edition. San Francisco: Jossey-Bass.

Mittelmark, M.B. (Ed.) (1997). Health promotion settings. *Internet Journal of Health Promotion*, http://www.rhpeo.org/ijhp-articles/1997/2/index.htm. Accessed 12.06.09.

Mittelmark, M.B. (2001). Investing in communities: principle, panacea or placebo? *Tijdschrift voor Gezondheidswetenschappen*, 79(8): 532-535.

Morgan, A. and Ziglio, E. (2007). Revitalising the evidence base for public health: an assets model. *Promotion & Education*, 14(2)(Suppl 2): 17-22.

Muro, M. and Jeffrey, P. (2008). A critical review of the theory and application of social learning in participatory natural resource management processes. *Journal of Environmental Planning and Management*, 51(3): 325-344.

Naaldenberg, J., Vaandrager, L., Koelen, M., Wagemakers, A., De Hoog, C. and Saan, H. (2009). Elaborating on systems thinking in health promotion practice. *Global Health Promotion*, 16(1): 39-47.

Naylor, P.J., Wharf-Higgins, J., Blair, L., Green, L. and O'Connor, B. (2002). Evaluating the participatory process in a community-based heart health project. *Social Science & Medicine*, 55(7):1173-1187.

NIGZ (2009). *Verslag van het 6e Nationaal congres gezondheidsbevordering en preventie* [Report of the 6th National congress Health Promotion and prevention]. Amersfoort, 29 Januari, 2009. http://www.nigz.nl/index.cfm?act=actueel.nieuwsitem&id=214. Accessed 12.06.09.

Nishtar, S. (2007). Community health promotion – a step further (Ed.). *Promotion & Education*, 14(2): 61-62.

Norris, F.H., Stevens, S.P., Pfefferbaum, B., Wyche, K.F. and Pfefferbaum, R.L. (2008). Community resilience as metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41(1-2): 127-150.

Nutbeam, D. (1998a). Health promotion glossary. *Health Promotion International*, 13(4): 349-364.

Nutbeam, D. (1998b). Evaluating health promotion-progress, problems and solutions. *Health Promotion International*, 13(1): 27-44

Nutbeam, D. (1999). Evaluatie van oorzaak en gevolg in gezondheidsbevorderingsprojecten: aanpassing van onderzoeksmethoden aan interventie methoden. [Evaluation of causes and results in projects to promote health: Adjustment of research methods to intervention methods]. *Tijdschrift voor Gezondheidswetenschappen*, 77(1): 15-23.

Nutbeam, D. and Bauman, A. (2006). *Evaluation in a Nutshell. A practical guide to the evaluation of health promotion programs*. Sydney: McGraw-Hill Australia Pty Ltd.

Oakley, A. (2005). Design and analysis of social intervention studies in health research. In: Bowling, A. and Ebrahim, S. *Handbook of health research methods. Investigation, measurement and analysis*. New York: Open University Press, 246-265.

Øvretveit, J. and Gustafson, D. (2003). Improving the quality of health care. Using research to inform quality programmes. *British Medical Journal*, 326(7392): 759-761.

Onyx, J. and Bullen, P. (2000). Measuring social capital in five communities. *The Journal of Applied Behavioral Science*, 36(1): 23-42.

Patton, M.Q. (1990). Qualitative evaluation and research methods. Second edition. London: Sage Publications.

Patton, M.Q. (2000). Utilization-focussed evaluation. In: Stufflebeam, D.L., Madaus, G.F. and Kellaghan, T. (Eds.). *Evaluation models*. Boston: Kluwer Academic Publishers.

Pelikan, J.M. (2007). Understanding differentiation of health in late modernity by use of sociological systems theory. In: McQueen, D.V. and Kickbush, I. (Eds.). *Health and modernity. The role of theory in health promotion*. New York, Springer, 74-102.

Peters, V. (2004). *A support program for qualitative analysis (computer program)*. Nijmegen (the Netherlands): University of Nijmegen.

Potvin, L. (2007). Managing uncertainty through participation. In: McQueen, D.V. and Kickbush, I. (Eds.). *Health and modernity. The role of theory in health promotion*. New York, Springer, 103-128.

Potvin, L. and McQueen, D.V. (2007). Modernity, Public Health, and Health Promotion. A Reflexive Discourse. In: McQueen, D.V. and Kickbush, I. *Health and Modernity. The Role of Theory in Health Promotion*. New York: Springer, 12-20.

Potvin, L. and McQueen, D.V. (2008). Practical dilemmas for health promotion evaluation. In: Potvin, L. and McQueen, D.V. (Eds.), *Health promotion practices in the Americas. Values and research*. New York: Springer, 25-45.

Pretty, J.N. (1995). *Regenerating agriculture: Policies and practice for sustainability and self reliance*. London: Earthscan Publication Ltd.

Prochaska, J.J., Spring, B. and Nigg, C.R. (2008). Multiple health behavior change research: An introduction and overview. *Preventive Medicine*, 46(3): 181-188.

Projectcommissie Sociaal-Economische Gezondheids Verschillen – tweede fase (2001). *Sociaal Economische Gezondheidsverschillen verkleinen* [To reduce social and economic differences. Final report and policy recommendations]. Eindrapportage en beleidsaanbevelingen van de Projectcommissie SEGV-II. Den Haag (the Netherlands): Zorg Research Nederland.

Raphael, D., Curry-Stevens, A. and Bryant, T. (2008). Barriers to addressing the social determinants of health: Insights from the Canadian experience. *Health Policy*, 88(2-3): 222-235.

Reason, P. and Bradbury, H. (2001). Inquiry and participation in search of a world worthy of human aspiration. In: Reason, P. and Bradbury, H. (Eds.). *Handbook of action research: Participative inquiry and practice*. London: Sage Publications.

Reason, P. and Bradbury, H. (2008). *Handbook of action research: Participative inquiry and practice*. Second edition. London: Sage Publications.

Reason, R. (2006). Choice and quality in action research practice. *Journal of Management Inquiry*, 15(2): 187-203.

Reed, J., Richardson, E., Marais, S. and Moyle, W. (2008). Older people maintaining well-being: an international Appreciative Inquiry study. *International Journal of Older People Nursing*, 3(1): 68-75.

Rice, M. and Franceschini, M.C. (2007). Lessons learned from the application of a participatory evaluation methodology to Healthy municipalities, cities and communities initiatives in selected countries of the Americas. *Promotion & Education*, 14(2): 68-73.

Rifkin, S.B., Lewando-Hundt, G. and Draper, A.K. (2000). *Participatory approaches in health promotion and health planning: A literature review*. London: Health Development Agency.

Rifkin, S.B., Muller, F. and Bichmann, W. (1988). Primary health care: On measuring participation. *Social Science & Medicine*, 26(9): 931-940.

Rifkin, S.B. (2000). Major issues arising from the literature review on participatory apporaches to health improvement. In: Draper, A. and Hawdon, D. (Eds.). *Improving health through community participation: Concepts to commitment*. Proceedings of a Health Education Authority Workshop, 9-10 December 1998, Leicester. London: Health Development Agency.

Rimer, B.K., Glanz, K. and Rasband, G. (2001). Searching for evidence about health education and health behavior interventions. *Health Education & Behavior*, 28(2): 231-248.

RIVM (2007). *PHSF 2006: Care for health*. Bilthoven: National Institute of Public Health and the Environment (RIVM), the Netherlands. http://www.rivm.nl/vtv/phsf2006 version 1.0. Accessed 08.01.08.

Rogers, E.M. (1995). *Diffusion of innovations*. New York: Free Press.

Rogers, E.M. and Schoemaker, F.F. (1971). *Communication of innovations: A cross cultural approach*. New York: Free Press.

Rootman, I. (2001). Introduction to the book. In: Rootman, I, Goodstadt, M., Hyndman, B., McQueen, D.V., Potvin, L., Springett, J. and Ziglio, E. (Eds.). *Evaluation in health promotion. Principles and perspectives*. Denmark: WHO Regional Publications, European Series, 92: 3-6.

Rootman, I., Goodstadt, M., Potvin, L. and Springett, J. (2001). A framework for health promotion evaluation. In: Rootman, I, Goodstadt, M., Hyndman, B., McQueen, D.V., Potvin, L., Springett, J. and Ziglio, E. (Eds.). *Evaluation in health promotion. Principles and perspectives*. Denmark: WHO Regional Publications, European Series, 92: 7-38.

Roussos, S.T. and Fawcett, S.B. (2000). A review of collaborative partnerships as a strategy for improving community health. *Annual Review of Public Health*, 21(9): 369-402.

Rütten, A., Abu-Omar, K., Leven, L., Morgan, A., Groce, N. and Stuart, J. (2008). Research note: social catalysts in health promotion implementation. *Journal of Epidemiology and Community Health*, 62(6): 560-565.

Ruwaard, D., Kramers, P.G.N, Van den Berg-Jets, A. and Achterberg, P.W. (Eds.) (1994). *Public Health Status and Forecast: The health status of the Dutch population over the period 1950–2010*. RIVM Den Haag (the Netherlands): SDU-Uitgeverij.

Saan, H. and De Haes, W. (2005). *Gezond effect bevorderen. Het organiseren van effectieve gezondheidsbevordering* [Stimulating health promotion: the organization of effective health promotion]. Woerden (the Netherlands): NIGZ.

Saan, H. and De Haes, W. (2008). Kennismanagement voor gezondheidsbevordering. Spectrum. *Tijdschrift voor Gezondheidswetenschappen*, 86(4): 159-163.

Saan, H., De Haes, W. and Hekking, C. (2007a). *Eindrapport pilot referentiekader gezondheidsbevordering 2006–2007* [Final report pilot project Health promotion framework]. Woerden (the Netherlands): NIGZ.

Saan, H., De Haes, W., Hekking, C. and Wagemakers, A. (2007b). *Handleiding audit referentiekader gezondheidsbevordering* [Instructions for audit with the Health promotion framework]. Woerden (the Netherlands): NIGZ.

Sadler-Smith, E. (2006). *Learning and development for managers. Perspectives from research and practice*. Oxford: Blackwell Publishing.

Schmidt, M., Robbesom, D., Bakker, M. and Stronks, K. (2007a). *Empowerment in het referentiekader gezondheidsbevordering. Een uitwerking van het begrip empowerment in relatie tot health literacy* [Empowerment in the Health promotion framework. Operationalisation of the concept empowerment in relation to health literacy]. Den Haag (the Netherlands): Academisch Medisch Centrum, Afdeling Sociale Geneeskunde, gemeente Den Haag, dienst OCW/GB.

Schmidt, M., Plochg, T., Arah, O.A., Klazinga, N.S. and Stronks, K. (2009). Collaborative research through the eyes of researchers: lessons from the evaluation of a local public health program. In: Schmidt, M. *Tackling health inequalities in The Hague. A process evlaution of a programme to improve health in deprived neighbourhoods*. Thesis, Amsterdam, 97-110.

Schmidt, M., Plochg, T., Middelkoop, B.J.C., Joosen, I., Waterman, M.H., Klazinga, N.S. and Stronks, K (2007b). Het conceptueel raamwerk voor de evaluatie van de wijkgerichte aanpak ter verkleining van gezondheidsverschillen in Den Haag [A conceptual frame to evaluate the community approach in reducing health inequalities in The Hague]. *Tijdschrift voor Gezondheidswetenschappen*, 84(8): 457-463.

Schnabel, P., Bijl, R. and De Hart, J. (2008). *Betrekkelijke betrokkenheid. Studies in sociale cohesie* [Relative involvement. Studies in social cohesion]. Sociaal en cultureel rapport 2008. Den Haag; Sociaal en Cultureel Planbureau.

Schulz, A.J., Israel, B.A. and Lantz, P. (2003). Instrument for evaluating dimensions of group dynamics within community-based participatory research partnerships. *Evaluation and Program Planning*, 26(3): 249-262.

Schulz, A. and Northridge, M. (2004). Social determinants of health: Implications for environmental health promotion. *Health Education & Behavior*, 31(4): 455-471.

Schultz, J., O'Brien, A.M. and Tadesse, B. (2008). Social capital and self-rated health: Results from the US 2006 social capital survey of one community. *Social Science & Medicine*, 67(4): 606-617.

Sicotte, C., D'Amour, D. and Moreault, M.P. (2002). Interdisciplinary collaboration within Quebec community health care centres. *Social Science & Medicine*, 55(6): 991-1003.

Sogoric, S., Middleton, J., Lang, S., Ivankovic, D. and Kern, J. (2005). A naturalistic inquiry on the impact of interventions aiming to improve health and the quality of life in the community. *Social Science & Medicine*, 60(1): 153-164.

Soltis-Jarret, R.N. (1997). The facilitator in participatory action research: Les raisons d'être. *Advances in Nursing Science*, 20(2): 45-54.

South, J., Fairfax, P. and Green, E. Developing an assessment tool for evaluating community involvement. *Health Expectations*, 8(1): 64-73.

Spence, J.C. and Lee, R.E. (2003). Toward a comprehensive model of physical activity. *Psychology of Sport and Exercise*, 4(1): 7-24.

Speller, V. (1997). The search for evidence of effective health promotion. *British Medical Journal*, 315: 361-363.

Springett, J. and Leavy, C. (1995). Participatory action research: the development of a paradigm, dilemma's and prospects. In: Bruce, N., Springett, J., Hotchkiss J, Scott-Samuel, A. (Eds.). *Research and Change in Urban Community Health*. Aldershot: Avebury, 57-66.

Steckler, A., McLeroy, K.R., Goodman, R.M., Bird, S.T. and McCormick, L. (1992). Toward integrating qualitative and quantitative methods: An introduction. *Health Education Quarterly*, 19(1): 1-8.

Steenbakkers, M., Bastiaens, C., Leurs, M., Ruland, E. and Jansen, M. (2005). Vijf jaar community based werken in Hartslag Limburg (1998-2003). Ervaringen uit de praktijk. [Five year community-based work in 'Hartslag Limburg'. Experiences from practice]. *Tijdschrift voor Gezondheidswetenschappen*, 83(2):108-112.

Stuttaford, M. and Coe, C. (2007). The 'Learning' component of participatory learning and action in health research: reflections from a local sure start evaluation. *Qualitative Health Research*, 17(10): 1351-1360.

Sullivan, M., Kone, A., Senturia, K.D., Chrisman, N.J., Ciske, S.J. and Krieger, J.W. (2001). Researcher and researched-community perspectives: Towards bridging the gap. *Health Education & Behavior*, 28(2): 130-149.

Susman, G.I. and Evered, R.D. (1978). An assessment of the scientific merits of action research. *Administrative Science Quarterly*, 23(4): 582-603.

Tang, K.C., Ehsani, J. and McQueen, D. (2003). Evidence based health promotion: recollections, reflections and reconsiderations. *Journal of Epidemiology and Community Health*, 57(11): 841-843.

The Galway Consensus Conference Statement. *Toward domains of core competencies for building global capacity in health promotion*. Draft. June, 2008.

Tones, K. (1999). De evaluatie van gezondheidsbevordering: een verhaal van drie fouten. [Evaluation health promotion. A tale of three errors]. *Tijdschrift voor Gezondheidswetenschappen*, 77: 24-28.

Tones, K. (2000). Evaluating health promotion: a tale of three errors. *Patient Education Counseling*, 39(2-3): 227-236.

Tones, K. and Green, J. (2004). *Health promotion: planning and strategies*. London: Sage Publications.

Thompson, J., Barber, R., Ward, P.R., Boote, J.D., Cooper, S.L., Armitage, C.J. and Jones, G.J. (2009). Health researchers' attitudes towards public involvement in health research. *Health Expectations*, 12(2): 209-220.

Thompson, B., Coronado, G., Snipes, S. and Puschel, K. (2003). Methodologic advances and ongoing challenges in designing community-based health promotion programs. *Annual Review of Public Health*, 24: 315-340.

Thorogood, M. and Coombes, Y. (Eds.). *Evaluating health promotion: practices and methods*. Second edition. Oxford: Oxford University Press.

Trondsen, M. and Sandaunet, A.G. (2009). The dual role of action researcher. *Evaluation and Program Planning*, 32(1): 13-20.

Uitenbroek, D.G., Ujcic-Voortman, J.K., Janssen, A.P., Tichelman, P.J. and Verhoeff, A.P. (2006). *Gezond zijn en gezond leven in Amsterdam; Amsterdamse gezondheidsmonitor. Gezondheidsonderzoek 2004* [Being healthy and living healthy in Amsterdam. Health Monitor Amsterdam. Health Research 2004]. Amsterdam: GGD Amsterdam cluster epidemiologie.

Uitewaal, P.J., Manna, D.R., Bruijnzeels, M.A., Hoes, A.W., Thomas, S. (2004). Prevalence of type 2 diabetes mellitus, other cardiovascular risk factors, and cardiovascular disease in Turkish and Moroccan immigrants in North West Europe: A systematic review. *Preventive Medicine*, 39(6): 1068-1076.

Vaandrager, H.W. (1995). *Constructing a healthy balance: Action and research ingredients to facilitate the process of health promotion*. PhD dissertation. Wageningen (The Netherlands): Agricultural University, Communication and Innovation Studies.

Van Assema, P., Steenbakkers, M., Bastiaens, C. and Rond, G. (2006). Harstlag Limburg: integrale gezondheidsbevordering in buurten, gemeenten, bij huisartsen en in het ziekenhuis. Het interventieproces van het community project binnen Hartslag Limburg ['Hartslag Limburg': community-based health promotion integrated with a high-risk approach in GP-practices and the hospital. Project development: uniting practitioners, researchers and policymakers]. *Tijdschrift voor Gezondheidswetenschappen*, 84(2): 231-237.

Van Dale, D., Witte, K. and Van Sonderen, J. (2008). Centrum gezond leven, van makelaar naar regisseur? [Centre for Healty Living, from broker to stage-manager?]. *Tijdschrift voor Gezondheidswetenschappen*, 86(4): 169-171.

Van de Goor, I., Busch, M., Hogendoorn, S., Hommels, L., Kok, H. and Kuunders, T. (2007). *"Beleid en strategie" in relatie tot gezondheidsbevordering – een nadere uitwerking. Een checklist voor de ontwikkeling van lokaal gezondheidsbeleid* [Policy and strategy in relation to health promotion. A checklist to develop local health policy]. Tilburg (The Netherlands): Academische Werkplaats Openbare Gezondheidszorg Tilburg.

Van der Smissen, P.J.A.M., Kok, H.H., Van der Velden, G.C.A. and Warmenhoven, N.E. (2007). *De rol van leiderschap binnen gezondheidsbevordering. Een nadere onderbouwing en uitwerking* [The role of leadership in health promotion]. Tilburg (the Netherlands): GGD West-Brabant in samenwerking met Academische werkplaats Openbare Gezondheidszorg Tilburg en Bureau Okapi.

Van Dillen, S., Hiddink, G.J., Koelen, M.A. and Woerkum, C.M.J van (2005). Nutrition communication styles of family doctors: results of quantitative research. *European Journal of Clinical Nutrition*, 59(Suppl 1): S47–S56.

Van Gemert, A. (2006). *Samenwerken aan een gezond Tivoli*. Actiebegeleidend onderzoek. [Working together on a healthy 'Tivoli'. Action Research]. Afdeling Gezondheidsbevordering. Vakgroep Onderzoek. Eindhoven (the Netherlands): GGD Eindhoven.

Van 't Riet, H. and De Boer, J. (2006). *Draaiboek. Gezonde leefgewoonten Westerpark. Voedings en beweeginterventie voor Turkse en Marokkaanse vrouwen* [Workbook. Healthy lifestyles Westerpark. Nutricion and exercise intervention for Turkish and Moroccan Women]. Amsterdam: GGD Amsterdam, cluster EDG.

Van 't Riet, H., Dijkshoorn, H., Corstjens, R. and Berkouwer, L. (2005). *Gezonde Leefgewoonten Westerpark. Kwalitatief interventieonderzoek naar overgewicht bij Turkse en Marokkaanse vrouwen van 25 tot 45 jaar*. Probleemanalyse [Healthy lifestyles in Westerpark. A qualitative intervention research on overweight among Turkish and Moroccan women in the age range 25 to 45 years. Problem assessment]. Amsterdam: GGD Amsterdam, cluster EDG.

Van 't Riet, H., Dijkshoorn, H. and Corstjens, R. (2006). *Evaluatierapport. Gezonde leefgewoonten Westerpark. Kwalitatief interventieonderzoek naar overgewicht bij Turkse en Marokkaanse vrouwen van 25 tot 45 jaar* [Evaluation report. Healthy lifestyles in Westerpark. A qualitative intervention research on overweight among Turkish and Moroccan women in the age range 25 to 45 years]. Amsterdam: GGD Amsterdam, cluster EDG.

Van Woerkum, C.M.J. (2000). Interactive policy making. *The Journal of Agricultural Education and Extension*, 6(3): 199-212.

Van Zee, W. and Hylkema, C. (2004). *Stadsdelen in cijfers 2004* [Numbers of city neighbourhoods 2004]. Amsterdam: Gemeente Amsterdam. Dienst onderzoek en Statistiek.

Veenhoven, R. (2004). Happiness as an aim in public policy. In: Lenley, A. and Joseph, S. (Eds.). *Positive psychology in practice*. Hoboken, New Jersey: John Wiley and Sons Inc.

Verbeke, L., Snyers, K., Kwanten, L. and Hasevoets, G. (2004). *Netwerken en lokaal welzijnsbeleid: model, meetinstrument en praktijk* [Networks and local well-being: model and tool for practice]. Brussel: Ministerie van de Vlaamse Gemeenschap.

Verhoeff, A.P. and Hesdahl, B. (2004). *Gezond leven Amsterdam. Nota Volksgezondheidsbeleid Amsterdam, 2004-2007*. [Healthy living Amsterdam. Note Public Health Policy]. Amsterdam: GG&GD Amsterdam.

Voorham, A.J.J., De Haes, W.F.M. and Mackenbach, J.P. (2002). Wijkgericht werken aan gezondheidsbevordering in vier achterstandswijken in Rotterdam. Leerpunten uit de praktijk. [Health promotion at the neighborhood level in four deprived areas in Rotterdam. Process analysis]. *Tijdschrift voor Gezondheidswetenschappen*, 80(7): 431-435.

Wagemakers, M.A.E. (2000). *Samenwerken aan gezondheid in de buurt*. Actiebegeleidend onderzoek in Eindhoven. [Working together on a healthy neigbourhood. Action research in Eindhoven]. Wageningen (the Netherlands): Leerstoelgroep Communicatie en Innovatie Studies,Wageningen Universiteit.

Wagemakers, A. (2006a). V*erslag werkbezoek Refka Eindhoven*. Pilot Project Referentiekader Gezondheidsbevordering. Wijkgezondheidswerk 2000 – 2004 en Gezond in de buurt 2004 2008. [Report workvisit Eindhoven. Pilot Project Health Promotion Framework. Health in the neighbourhood 2000-2004 and 2004-2008]. 1 juni 2006 Eindhoven.

Wagemakers, A. (2006b). *Verslag werkbezoek Refka Amsterdam*. Pilot Project Referentiekader Gezondheidsbevordering. Project Gezonde leefgewoonten Westerpark. [Report workvisit Amsterdam. Pilot Project Health Promotion Framework. Project Healthy lifestyles Westerpark]. 19 juni 2006 Amsterdam.

Wagemakers, A. (2006c). *Verslag werkbezoek GGD Gelre-IJssel*. Pilot Project Referentiekader Gezondheidsbevordering. Project Alcoholmatiging in de achterhoek. [Project moderation of alcohol use in the 'Achterhoek']. 21 november 2006, Zutphen.

Wagemakers, A. (2007a). *Verslag werkbezoek Refka II Eindhoven*. Pilot Project Referentiekader Gezondheidsbevordering. Wijkgezondheidswerk 2000 – 2004 en Gezond in de buurt 2004 2008. [Report workvisit II Eindhoven. Pilot Project Health Promotion Framework. Health in the neighbourhood 2000-2004 and 2004-2008]. 1 februari 2007 Eindhoven.

Wagemakers, A. (2007b). *Verslag werkbezoek II Refka Amsterdam*. Pilot Project Referentiekader Gezondheidsbevordering. Project Gezonde leefgewoonten Westerpark. [Report workvisit II Amsterdam. Pilot Project Health Promotion Framework. Project Healthy lifestyles Westerpark]. 12 februari 2007 Amsterdam.

Wagemakers, M.A.E. and Koelen, M.A. (2001). *Samenwerken aan gezondheid in de buurt. Een jaar verder. Action research in Eindhoven*. Verslag van de tweede evaluatieronde. [Working together on a healthy neigbourhood. Action research in Eindhoven. The second year]. Wageningen (the Netherlands): Leerstoelgroep Communicatie en Innovatie Studies, Wageningen Universiteit.

Wagemakers, M.A.E., Koelen, M.A., Van Nierop, P.W.M., Meertens, Y.E.G., Weijters, J.C.H.M. and Kloek, G.C. (2007a). Actiebegeleidend onderzoek ter bevordering van intersectorale samenwerking en bewonersparticipatie. De ervaringen met het wijkgezondheidswerk in Eindhoven [Participatory action research to promote intersectoral collaboration and community participation. The experience with "wijkgezondheidswerk" in Eindhoven]. *Tijdschrift voor Gezondheidswetenschappen*, 85(1): 23-31.

Wagemakers, A., Vaandrager, L., Koelen, M., Dijkema, P. and Corstjens, R. (2007b). *Sociaal draagvlak. Verslag van de uitwerking van 'sociaal draagvlak' voor het pilot project Referentiekader Gezondheidsbevordering.* [Social Support. Report on the elaboration of social support for the pilot project health promotion frame of reference]. Wageningen (The Netherlands): Gezondheid en maatschappij, Wageningen Universiteit.

Wagemakers, A., Corstjens, R., Koelen, M., Vaandrager, L., Van 't Riet, H. and Dijkshoorn, H. (2008). Participatory approaches to promote healthy lifestyles among Turkish and Moroccan women in Amsterdam. *Promotion & Education*, 15(4): 17-23.

Wagemakers, A., Vaandrager, L., Koelen, M.A., Saan, H. and Leeuwis, C. (In press). Community health promotion: A framework to facilitate and evaluate supportive social environments for health. *Evaluation and Program Planning.*

Wallerstein, N. (1999). Power between evaluator and community: research relationships within New Mexico's healthier communities. *Social Science & Medicine*, 49(1): 39-53.

Wallerstein, N. (2000). A participatory evaluation model for healthier communities: Developing indicators for New Mexico. *Public Health Reports*, 115(2-3): 199-204.

Wallerstein, N. (2006). *What is the evidence on effectiveness of empowerment to improve health?* Copenhagen, WHO Regional Office for Europe (Health Evidence Network report) http://euro. who.int/Document/E88086.pdf. Accessed 12.06.09.

Wallerstein, N., Polascek. M. and Maltrud, K. (2002). Participatory evaluation model for coalitions: The development of system indicators. *Health Promotion Practice*, 3(3): 361-373.

Waterman, H., Tillen, D., Dickson, R. and De Koning, K. (2002). Action research: A systematic review and guidance for assessment. *Health Technology Assessment*, 5(23): 1-66.

Watson, M.C. (2002). Normative needs assessment: is this an appropriate way in which to meet the new public health agenda? *International Journal of Health Promotion and Education*, 40(1): 4-8.

Weijters, J.C.H.M. and Koelen, M.A. (2002). *Samenwerken aan gezondheid in de buurt*. Action research in Eindhoven: verslag van de derde evaluatieronde. [Working together on a healthy neigbourhood. Action research in Eindhoven. Third evaluation round]. Wageningen (The Netherlands): Leerstoelgroep Communicatie en Innovatie Studies, Wageningen Universiteit.

Weijters, J.C.H.M. and Koelen, M.A. (2003). *Samenwerken aan gezondheid in de buurt*. Actiebegeleidend onderzoek in Eindhoven: verslag van de vierde evaluatieronde. [Working together on a healthy neigbourhood. Action research in Eindhoven. Fourth evaluation round]. Wageningen (the Netherlands): Leerstoelgroep Communicatie en Innovatie Studies, Wageningen Universiteit.

Weitzman, E.R. and Kawachi, I. (2000). Giving means receiving: The protective effect of social capital on binge drinking on college campuses. *American Journal of Public Health*, 90(12): 1936-1939.

Wendel-Vos, W., Droomers, M., Kremers, S., Brug, J. and Van Lenthe, F. (2007). Potential environmental determinants of physical activity in adults: A systematic review. *Obesity Reviews*, 8(5): 425-440.

Wenzel, E. (1997). A comment on settings in health promotion. *Internet Journal of Health Promotion*. http://www.rhpeo.org/ijhp-articles/1997/1/index.htm. Accessed 12.06.09.

White, G.W., Suchowierska, M. and Campbell, M. (2004). Developing and systematically implementing participatory action research. *Archives of Physical Medicine and Rehabilitation*, 85(Suppl 2): s3-s12.

WHO (1978) *Alma Ata 1977. Primary Health Care*. Geneva: World Health Organization, UNICEF.

WHO (1986). *Ottawa charter of health promotion*. Copenhagen: World Health Organization.

WHO (1997). *The Jakarta declaration on leading health promotion into the 21th Century*. Geneva: World Health Organization.

WHO (1998). *Health promotion glossary*. Geneva: World Health Organization.

WHO (2004). *Global strategy on diet, physical activity and health*. Geneva: World Health Organization.

WHO (2005). *The Bangkok charter for health promotion in a globalized world*. Bangkok: World Health Organization.

WHO (2006). *Working together for health, The World health Report 2006*. Geneva: World Health Organization.

WHO (2009). *The Nairobi call to action for closing the implementation gap in health promotion*. Nairobi: World Health Organization.

Whyte, F.W., Greenwood, D.J. and Lazes, P. (1991). Participatory action research: through practice to science in social research. In: Whyte, W.F. (Ed). *Participatory action research*. London: Sage Publications, 19-55.

Wicks, P.G., Reason, P. and Bradbury, H. (2008). Living inquiry: personal, political and philosophical groundings for action research practice. In: Reason, P. and Bradbury, H. (Eds.). *Handbook of action research: Participative inquiry and practice*. Second edition. London: Sage Publications, 15-30.

Wolf, T. (2001). A practitioner's guide to successful coalitions. *American Journal of Community Psychology*, 29(2): 173-191.

Wolff, N. (2000). Using RCT to evaluate socially complex services: problems, challenges and recommendations. *The Journal of Mental Health Policy and Economics*, 3(2): 97-109.

Yen, I.H. and Syme, S.L. (1999). The social environment and health: A discussion of the epidemiologic literature. *Annual Review of Public Health*, 20: 287-308.

Zakocs, R.C. and Edwards, E.M. (2006). What explains community coalition effectiveness? A review of the literature. *American Journal of Preventive Medicine*, 30(4): 351-361.

Zandee, D.P. and Cooperrider, D.L. (2008). Apreciative worlds, inspired inquiry. In: Reason, P. and Bradbury, H. (Eds.). *Handbook of action research: Participative inquiry and practice*. Second edition. London: Sage Publications, 190-198.

Zimmerman, M.A. and Rappaport, J. (1988). Citizen participation, perceived control and psychological empowerment. *American Journal of Community Psychology*, 16(5): 725-750.

Zuber-Skerrit, O. (2001). Action learning and action research: Paradigm, praxis and programs. In: Sankara, S., Dick, B. and Passfield, R. (Eds.). *Effective change management through action research and action learning: Concepts, perspectives, processes and applications*. Lismore, Australia: Southern Cross University Press.

Zuber-Skerrit, O. and Fletcher, M. (2007). The quality of an action research thesis in the social sciences. *Quality Assurance in Education*, 15(4): 413-436.

Summary

This thesis addresses the facilitation and evaluation of local social environment in community health promotion. Strategies in today's health promotion encompass individual and community level determinants of health, and the social and physical environment. Key principles in community health promotion are intersectoral collaboration and community participation. These strategies and principles are widely recognized because it is generally agreed that health education, e.g. making individuals aware of the negative consequences for health of their behavior, in itself is not enough to lead to the expected behavioral effects.

Community programs to promote health have been launched all over the world and fit well with Dutch policy that emphasizes the participation of all citizens in all facets of society. However, researchers, practitioners, and policymakers report uncertainty about how to implement and evaluate health promotion programs. In particular, the social environment of health is still overlooked and underexposed due to a lack of consensus on concepts relating to the social environment of health, a lack of information on interventions that bring about social change, and a lack of feasible methods and tools. Consequently, the effectiveness of health promotion may not be evaluated under all relevant headings.

Evaluation attempts show that the dominant scientific way to find evidence of the effectiveness of health promotion has not yet been very successful. Randomized Controlled Trials (RCT) and quasi experimental designs face problems with control due to interference of the socio-cultural and political context, the multiplicity of interventions, and the absence of an appropriate comparison group. There is a need for flexible and participatory approaches that consider the context and that measure processes as well as outcomes at different levels and moments in time. Action research is a promising alternative as it is characterized by ongoing evaluation at multiple times and the use of multiple and participatory methods (Chapter 1).

Action research has both an action function and an evaluation function. Through feedback, research findings are used immediately by the involved stakeholders. Consequently, action research can be classified as decision-oriented research. In action research, theory develops from a synthesis of what emerges from the data and from actual practice (Chapter 2).

The overall aim of this thesis is to gain the required knowledge to contribute to the development of methods, tools, and theory to facilitate and evaluate community health promotion. Case studies have been selected that are guided by action research or in which action research was part of the research activities. Methods, tools, and theory have been developed, piloted, and evaluated simultaneously and iteratively.

Case studies and partnerships in community health promotion

Action research was the leading approach in the Dutch programs *Working on the Health of Neighborhoods* in Eindhoven and *Healthy Lifestyles* in Amsterdam and was part of the research activities of six partnerships in health promotion.

The aim of the program in Eindhoven was to reduce socio-economic inequalities in health (Chapter 3). To achieve this aim, the Municipal Health Service (MHS), in

collaboration with organizations working in the neighborhoods, initiated several activities with and for inhabitants. The program has been successful in establishing intersectoral collaboration and initiating community participation. Although the program started as a top-down program, over its course it became more and more bottom-up. The participatory action research facilitated the restart and continuation of the program, the achievement of intersectoral collaboration, the initiation of community participation, and the baseline measurement of the RCT.

In the *Healthy Lifestyle* program in Amsterdam, community participation was both the main working principle and the main goal (Chapter 4). The MHS carried out a qualitative study on the background of overweight in Turkish and Moroccan women aged 25 to 45 years and on opportunities for promoting health. The aim of the program was to increase the women's participation and to evaluate participation levels in all phases. In total, 120 women (15% of the target population) participated in one or more phases of the program: the needs assessment, development, implementation, and evaluation of aerobic lessons and nutrition interventions. Results show that women appreciate the opportunity to participate but have to learn how to participate. Other stakeholders, such as organizations, needed to be convinced of the necessity to engage in the program. The participatory approaches facilitated participation at the desired level in the different phases of the program.

In six different partnerships, a Checklist for Coordinated Action was developed and assessed for usability (Chapter 7). The partnerships were a program of the National Institute of Sport and Physical Activity (NISB), an academic collaborative (AGORA), and four local partnerships in three cities and one town in the Netherlands. The partnerships addressed different themes such as healthy behavior, healthy ageing, overweight, nutrition and loneliness. The use of the Checklist for Coordinated Action and the accompanying methods resulted in actionable knowledge in all partnerships. Actionable knowledge contributes to day-to-day partnership work, teambuilding, evaluation purposes, and eventually to change in the social environment of health.

Developed methods and tools

Methods and tools have been developed, piloted, and evaluated in collaboration with the stakeholders. In the methods and tools, participation and collaboration are measured in terms of quantifiable characteristics and on different features or dimensions of a program. The rationale for quantifying participation levels and program dimensions is that it offers an easy means to note strengths and areas for improvement at a glance.

Participation levels were measured using Pretty's typology, consisting of 7 participation levels (no participation, passive participation, participation by information, participation by consultation, functional participation, interactive participation, self-mobilization). The case studies in Eindhoven and Amsterdam showed that to use the tool, activities and phases must be clearly distinguished and defined. As in general participants find it difficult to judge participation levels, the tool has been further simplified. Also, its use became more focused on initiating dialogue (Chapters 3 and 4).

Next, based on the case studies and experiences in other community health programs, factors that are important in community health promotion were identified and a framework to facilitate and evaluate the social environment was developed. Identified factors influencing the success and sustainability of community health and coordinated action are: the representation of different stakeholders, including community members; discussion on aims, objectives, tasks and roles; good communication infrastructure; visibility of activities, outcomes, and individual contributions; and who nurtures the processes (Chapter 5). The developed framework (Chapter 6) describes the relation between the social environment and health predicting mediators. Participation and collaboration were selected as core concepts in moderating the social environment of health because these terms give insight into the actual dynamics of health promotion practice. The framework consists of variables of participation and collaboration, examples of qualitative and quantitative operationalizations, and a continuum of four different levels: individual, organizational, coalition, and community.

Based on the insights of the previous studies, the coordinated action checklist was developed and piloted to measure participation on different dimensions. Piloting the checklist resulted in a flexible checklist fitting partnerships' needs and desires. Piloting in multiple cases contributes to the tool's external validity (Chapter 7).

The case studies altogether show that the developed methods and tools in action research are helpful in providing feedback on strengths and areas for improvement, which in turn provokes dialogue, discussion, and reflection. Feedback contributes to the usability of the results, increases the effects of the program, and activates learning processes. Feedback requires stakeholders to be able to reflect and self-reflect. The use of the principles of appreciative inquiry in methods and tools contributes to a richer understanding, stimulates participation, and creates a unique climate for changing the social environment of health (Chapter 8).

The thesis has revealed that action research methods and tools are valuable because they fit community health promotion, they generate actionable knowledge for relevant stakeholders, and they are essential and complementary in capturing and assessing the full effects of a community health promotion intervention. Scientific quality is assured by the use of different verification techniques and scientific criteria.

Contribution to the theory of community health promotion and its evaluation

The framework to facilitate and evaluate the social environment of health provides common ground for researchers and practitioners in health promotion, enables the use of multiple methods and sources in a flexible way, and guides learning processes. The four guidelines on how to apply the framework are: use the variables as a menu, set specific aims for social change processes, use an action research approach, and triangulate data.

Participation is of cardinal value as it contributes to health and serves multiple purposes in health promotion programs. Systematic learning processes can make participation manageable, and research activities are a proper way to facilitate those learning processes. Nonetheless, the potential of participation has not yet been

harnessed. Participation thrives in principle-based programs: programs that are characterized by the co-generation of knowledge by involved stakeholders in a flexible and tailored way. However, the international tendency is to centrally steer pre-packaged programs: programs that are characterized by scientific knowledge stemming from professionals and by protocols that must be followed.

Healthy research, practice, and policy

To harness and evaluate the full potential of participation in principle-based programs, the thesis concludes with future directions for science, practice, and policy (Chapter 8).

Science can benefit tremendously from applying a research paradigm that encompasses the measurement of assets and deficits and the use of multiple research approaches. This so-called *healthy research paradigm* combines the asset model, as health promotion in its essences strives to identify assets that contribute to health, and the deficit model, the prevailing research model that primarily focuses on deficits or risks. The combination of RCT and action research results in the attainment of qualitative and quantitative data, small-scale and large-scale results, and intermediate and process outcomes.

Thus, a healthy research paradigm enables multi-disciplinary researchers to address challenges in the evaluation of community health promotion: building multi-approach research, stakeholder learning, measuring ancillary participation results, addressing and assessing principle-based interventions, and further developing theory.

Practice can benefit from developing and implementing principle-based programs. The fostering and coordination of participation and learning processes requires a specific set of competencies related to working with people, e.g. communication, social skills and conflict management.

Policies of governments and funding agencies, journals, higher education establishments and universities, and organizations can support science and practice by stimulating opportunities for action research and principle-based programs.

The most essential factor is that researchers, practitioners, and policy makers periodically reflect on what they have learned so far, and use the answers to adjust future research, programs, and policies. It is through collaboration and participation that they will find ways to actively create supportive social environments for health.

Samenvatting

Dit proefschrift gaat over het optimaliseren van de sociale omgeving van gezondheid. Om de sociale omgeving te optimaliseren is onderzoek gedaan in community projecten voor gezondheidsbevordering. Vaak richten strategieën in gezondheidsbevordering zich op individuele determinanten en op determinanten van de sociale en fysieke omgeving. Intersectorale samenwerking en participatie van burgers zijn sleutelprincipes in gezondheidsbevordering. Deze strategieën en principes worden wereldwijd erkend en toegepast omdat alleen gezondheidsvoorlichting, zoals mensen bewust maken van de negatieve gevolgen van hun gedrag, vaak niet voldoende is voor het realiseren van gedragsverandering.

De community-aanpak sluit goed aan bij het Nederlandse beleid dat de participatie van burgers op alle terreinen nastreeft. Desondanks geven onderzoekers, praktijkwerkers en beleidsmakers aan dat nog onvoldoende duidelijk is hoe community projecten geïmplementeerd en geëvalueerd kunnen worden. De sociale omgeving van gezondheid wordt vaak vergeten of onderbelicht omdat er geen overeenstemming is over de betekenis van het concept 'sociale omgeving', er gebrek is aan informatie over interventies die verandering in de sociale omgeving tot stand brengen en er geen geschikte methoden en instrumenten zijn om veranderingen in de sociale omgeving van gezondheid te evalueren. Het gevolg is dat de effectiviteit van community projecten niet op alle relevante aspecten geëvalueerd wordt.

Tot nu toe blijkt dat gebruikelijke methoden voor het evalueren van community projecten weinig succesvol zijn. Randomised Controlled Trials (RCT) en onderzoek met een quasi-experimentele opzet kunnen de 'controle'-eis niet waarmaken omdat er interactie is met de sociaal-culturele en politieke context, er meerdere variabelen een rol spelen en omdat een geschikte controlegroep vaak ontbreekt. In de evaluatie van community projecten is behoefte aan flexibele en participatieve methoden die rekening houden met de context, die zowel proces- als uitkomstmaten meten op verschillende niveaus en op verschillende momenten in de tijd. Om deze reden zijn in dit proefschrift projecten en samenwerkingsverbanden geselecteerd waarin actieonderzoek is uitgevoerd (hoofdstuk 1).

Actieonderzoek heeft zowel een actiefunctie als een evaluatiefunctie. Door feedback worden resultaten van het onderzoek onmiddellijk gebruikt door de betrokkenen. Als zodanig kan actieonderzoek worden geclassificeerd als decisiegericht onderzoek. In actieonderzoek wordt (voortdurend) theorie ontwikkeld door opgedane inzichten terug te koppelen naar de praktijk en deze te toetsen (hoofdstuk 2).

Het doel van dit proefschrift is om een bijdrage te leveren aan de methoden, instrumenten en theorie voor het faciliteren en evalueren van community projecten voor gezondheidsbevordering. Methoden, instrumenten en theorie zijn tegelijkertijd en op een iteratieve wijze ontwikkeld, getest en geëvalueerd.

Community projecten en samenwerkingsverbanden gezondheidsbevordering

Actieonderzoek is uitgevoerd in het project *Wijkgezondheidswerk* in Eindhoven, het project *Gezonde leefgewoonten* in Amsterdam en zes andere samenwerkingsverbanden.

Het doel van het project in Eindhoven was het verkleinen van sociaaleconomische gezondheidsverschillen (hoofdstuk 3). Om dit doel te bereiken heeft de GGD in samenwerking met organisaties in de buurten verschillende activiteiten opgezet met en voor bewoners.

Het project is succesvol geweest in het bereiken van intersectorale samenwerking en in het initiëren van participatie van burgers. Hoewel het project top-down gestart is, werd het geleidelijk aan steeds meer bottom-up. Het actieonderzoek heeft een faciliterende rol gehad in het overwinnen van de startproblemen, de voortgang van het project en de afstemming tussen de praktijk en de verschillende onderzoeken.

In het project *Gezonde leefgewoonten* in Amsterdam was participatie het belangrijkste principe en het belangrijkste doel (hoofdstuk 4). De GGD heeft kwalitatief onderzoek uitgevoerd naar oorzaken van overgewicht bij 25-40-jarige Turkse en Marokkaanse vrouwen en naar mogelijkheden voor gezondheidsbevordering. Het doel van het project was om de participatie van vrouwen te bevorderen en te evalueren.

In totaal hebben 120 vrouwen (15% van de doelgroep) meegedaan aan één of meer fasen van het project: de behoefte-inventarisatie, de ontwikkelingsfase, de implementatiefase en de evaluatiefase. Dit heeft geresulteerd in een beweeginterventie (aerobicslessen) en een voedingsinterventie.

Uit de resultaten blijkt dat vrouwen graag participeren maar dat het voor hen een leerproces is. De GGD heeft de vrouwen herhaaldelijk moeten uitleggen wat van hen verwacht wordt. Ook is het belangrijk om organisaties te overtuigen van het belang om mee te doen aan het project. Het actieonderzoek heeft participatie van de vrouwen in de verschillende fasen van het project bevorderd.

In zes samenwerkingsverbanden voor gezondheidsbevordering is een instrument (Checklist for Coordinated Action) ontwikkeld en getoetst op bruikbaarheid (hoofdstuk 7). De samenwerkingsverbanden zijn een project van het Nationaal Instituut voor Sport en Bewegen (NISB), een academische werkplaats (AGORA) en vier lokale samenwerkingsverbanden in Eindhoven, Delft, Zwolle en Epe. De onderwerpen waar de samenwerkingsverbanden zich op richten zijn gezond gedrag, gezond ouder worden, overgewicht, voeding en eenzaamheid.

De toepassing van de checklist heeft in alle samenwerkingverbanden direct toepasbare kennis opgeleverd. Deze kennis draagt bij aan de dagelijkse werkzaamheden, aan teambuilding, aan evaluatie van het samenwerkingsverband en aan het tot stand brengen van veranderingen in de sociale omgeving.

De ontwikkelde methoden en instrumenten

De gebruikte methoden en instrumenten zijn ontwikkeld en getoetst in samenwerking met de betrokkenen. Met de instrumenten kunnen participatieniveaus en verschillende dimensies van samenwerken kwantitatief gemeten worden. Door participatieniveaus en samenwerkingsdimensies te kwantificeren zijn de successen en de verbeterpunten snel inzichtelijk voor de betrokkenen.

Participatieniveaus zijn gemeten met de typologie van Pretty, die bestaat uit 7 niveaus (geen participatie, passieve participatie, participatie via informatie, participatie

via consultatie, functionele participatie, interactieve participatie, zelfmobilisatie).

Om de typologie toe te passen, is het noodzakelijk om de fasen van het project, behoefte-inventarisatie, ontwikkeling, uitvoering en evaluatie, duidelijk te onderscheiden en te benoemen. Omdat betrokkenen het vaak moeilijk vinden om participatieniveaus te beoordelen kan de toepassing van de typologie vereenvoudigd worden. Ook kan in de toepassing het initiëren van dialoog meer centraal gesteld worden (hoofdstuk 3 en 4).

Op basis van de ervaringen in de projecten in Eindhoven en Amsterdam en andere community projecten voor gezondheidsbevordering zijn succesfactoren voor community projecten voor gezondheidsbevordering geïnventariseerd en is een raamwerk samengesteld voor het faciliteren en evalueren van de sociale omgeving van gezondheid. De succesfactoren zijn: de vertegenwoordiging van betrokkenen uit verschillende sectoren, inclusief burgers; communicatie over missie, doelen, taken en rollen; een goede communicatiestructuur; zichtbaarheid van activiteiten, uitkomsten en individuele bijdragen en een coördinator die de processen begeleidt (hoofdstuk 5). Het raamwerk beschrijft de relatie tussen de sociale omgeving, intermediaire factoren voor gezondheid zoals leefstijl en kwaliteit van leven en gezondheid. Om het begrip sociale omgeving te operationaliseren zijn participatie en samenwerking als belangrijkste concepten gekozen. Participatie en samenwerking geven inzicht in wat er in de sociale omgeving gebeurt. Het raamwerk bevat variabelen voor participatie en samenwerking, voorbeelden van kwalitatieve en kwantitatieve operationalisaties en vier in elkaar overlopende niveaus: individueel, organisatie, samenwerkingsverband en community (hoofdstuk 6).

De 'Checklist for Coordinated Action' is ontwikkeld en getest op basis van de inzichten verkregen uit de verschillende studies. Met behulp van de checklist kan de samenwerking op verschillende dimensies gemeten worden. De checklist en bijbehorende methoden kunnen flexibel ingezet worden om aan te sluiten bij de behoeften en wensen van het samenwerkingsverband. Het testen in meerdere samenwerkingsverbanden draagt bij aan de externe validiteit van het instrument (hoofdstuk 7).

Feedback vormt een belangrijk onderdeel van het gebruik van de checklist. Feedback maakt de successen en verbeterpunten inzichtelijk, draagt bij aan dialoog, discussie en reflectie en het bruikbaar maken van de resultaten. Dit vergroot de effecten van het project en activeert leerprocessen. Het geven van feedback vereist dat betrokkenen in staat zijn tot reflectie en tot zelfreflectie.

Het gebruik van de principes van waarderend interviewen (appreciative inquiry) draagt bij aan de volledigheid van de resultaten, stimuleert participatie en creëert een uniek klimaat voor het veranderen van de sociale omgeving van gezondheid (hoofdstuk 8).

In dit proefschrift is aangetoond dat methoden en instrumenten in actieonderzoek waardevol zijn omdat deze aansluiten bij de principes van gezondheidsbevordering, bruikbare kennis opleveren voor de betrokkenen en essentieel en complementair zijn bij de effectevaluatie van community projecten. De wetenschappelijke kwaliteit van actieonderzoek wordt gewaarborgd door het toepassen van verschillende verificatietechnieken en wetenschappelijke criteria.

Bijdrage aan de theorie over community projecten en de evaluatie

Het raamwerk voorziet onderzoekers en praktijkwerkers in een gemeenschappelijk kader voor hanteerbaar maken van de sociale omgeving van gezondheid en het ontwikkelen van methoden en instrumenten. Voor het toepassen van het raamwerk zijn vier richtlijnen opgesteld: 1) gebruik de variabelen als een menu, 2) benoem specifiek doelen voor het veranderen van de sociale omgeving, 3) gebruik actieonderzoek en 4) pas triangulatie toe.

Participatie is in community projecten belangrijk omdat het op verschillende manieren bijdraagt aan gezondheid en verschillende doeleinden kan hebben in community projecten. Participatie kan hanteerbaar gemaakt worden door systematische leerprocessen te stimuleren. Het betrekken van betrokkenen in onderzoeksactiviteiten is een goede manier om de leerprocessen te faciliteren. Echter, de volledige potentie die participatie kan hebben komt momenteel nog niet tot zijn recht. Participatie staat centraal in 'principle-based' projecten. Dit zijn projecten waarin door betrokkenen op een flexibele wijze direct toepasbare kennis gegenereerd wordt. Echter, internationaal is het de tendens om 'pre-packaged' projecten te ontwikkelen. Hierin staat wetenschappelijke kennis ingebracht door experts en het volgen van protocollen centraal.

Gezond onderzoek, praktijk en beleid

Om de potentie van participatie tot zijn recht te laten komen zijn in het proefschrift aanbevelingen gedaan voor onderzoek, praktijk en beleid (hoofdstuk 8).

De wetenschap kan vooruitgang boeken door een onderzoekparadigma toe te passen dat niet alleen uit gaat van gezondheidsrisico's maar ook van de mogelijkheden om gezondheid te bevorderen. Dit wordt een 'healthy research paradigm' genoemd. Dit paradigma combineert het 'asset model' en het 'deficit model'. Gezondheidsbevordering is per definitie gericht op mogelijkheden die bijdragen aan gezondheid. Het dominante deficit model richt zich voornamelijk op risico's. Een dergelijk paradigma maakt gebruik van meerdere onderzoeksbenaderingen. De combinatie van quasi-experimenteel onderzoek en actieonderzoek leidt tot zowel proces- en uitkomstmaten, als kwalitatieve en kwantitatieve resultaten en korte- en lange termijn resultaten.

Een gezond onderzoeksparadigma stelt (multidisciplinaire) onderzoekers in staat om gezondheidsbevordering op alle relevante aspecten te evalueren door: het combineren van verschillende onderzoeksbenaderingen, het stimuleren van leerprocessen, het meten van participatieresultaten over langere perioden en in meerdere domeinen, het evalueren van principle-based interventies en het verder ontwikkelen van theorie van gezondheidsbevordering.

Voor de praktijk is het een uitdaging om principle-based projecten te implementeren. In principle-based projecten komt participatie tot zijn recht en worden leerprocessen gestimuleerd. Hiervoor zijn specifieke competenties zoals communicatievaardigheden, sociale vaardigheden en conflicthantering nodig. Deze zijn doorgaans niet opgenomen in het curriculum van hogescholen en universiteiten.

Het beleid van nationale en lokale overheden, financieringsorganisaties, tijdschriften, hogescholen en universiteiten en organisaties kan de wetenschap en de praktijk ondersteunen door actieonderzoek en principle-based projecten op de agenda te zetten, te stimuleren en te faciliteren.

Om dit alles te bewerkstelligen is het belangrijk dat onderzoekers, praktijkwerkers en beleidsmakers regelmatig met elkaar reflecteren op wat zij geleerd hebben en dat zij de leerervaring gebruiken om onderzoek, projecten en beleid aan te passen. Door participatie en samenwerking kunnen manieren gevonden worden om een gezonde sociale omgeving te creëren.

Dankwoord

Graag wil ik iedereen bedanken die heeft bijgedragen aan dit proefschrift.

Allereerst mijn co-promotoren Maria Koelen en Lenneke Vaandrager, mijn promotor Cees Leeuwis en mijn expert Hans Saan.

Maria, jou wil ik graag bedanken voor het idee voor de promotie, de inspirerende en prettige begeleiding en de suggesties, tips en aanwijzingen voor het schrijven. Je hebt altijd het vertrouwen gehad in de promotie en in mij, en dat heeft mij enorm gesteund en gemotiveerd. Je was er altijd en ik ben heel blij dat je – ook na je werk bij de universiteit en tijdens vakanties – co-promotor bent gebleven. Ik heb heel veel van je geleerd!

Lenneke, dank voor je ondersteuning, adviezen en altijd positieve support (☺). Je hebt gezorgd dat het mogelijk was om te schrijven, dat het gezellig was en dat er tijd was voor ontspanning en sport. Je bent een supercollega. Het is inspirerend, leuk en gezond om met jou samen te werken.

Cees, jou wil ik graag danken voor je waardevolle opmerkingen en suggesties om teksten te verbeteren. Ik heb onze overleggen heel prettig gevonden en ben blij met je bijdrage, inzet en ondersteuning.

Hans, jij bent degene die hielp om de grote lijn in het proefschrift te zien en je hebt mij ook geleerd hoe dat te doen. Je hebt kritische vragen gesteld en je hebt meegekeken hoe je het vakgebied gezondheidsbevordering vooruit kan helpen. Ik ben je dankbaar voor je tijd en je adviezen.

Graag wil ik ook mijn opponenten Bengt Lindström, Karien Stronks, Lynne Kennedy en Pieter van 't Veer bedanken voor het plaatsnemen in de promotiecommissie. Bengt and Lynne, thanks for your travel to Wageningen!

Catherine O'Dea, thank you very much for editing the papers. Your text suggestions have improved the papers a lot. It was a real pleasure to work with you.

Carry, Hedy, Dinie en Margaret, jullie hebben fantastisch werk geleverd. Carry, je bent snel en secuur. Je was er zelfs in de kerstvakantie. Dat was niet alleen gezellig maar heeft ook enorm geholpen om de deadline te halen.

Renate Siebes en Kitty van der Veer dank ik voor het vormgeven van het proefschrift. Zowel de binnenkant als de buitenkant zijn mooi en stralen een gezonde omgeving uit.

Natuurlijk bedank ik ook allen met wie ik de afgelopen jaren heb samengewerkt, zowel buiten als binnen de universiteit. Willy de Haes dank ik omdat je samen met Hans ons onderzoek hebt laten doen voor het Referentiekader Gezondheidsbevordering. Jullie zijn voor mij wegwijzers in het vakgebied. Paula Dijkema, jou wil ik danken voor de prettige samenwerking en de studenten die we samen begeleiden. René Corstjens, het is heel plezierig samenwerken. Voor mij ben je de beste gezondheidsbevorderaar. Alle andere mensen, van de GGD Amsterdam, Eindhoven, Gelre IJssel en Zwolle, van het NISB, het is inspirerend en prettig om met jullie samen te werken! De Academische Werkplaats is voor mij een leerzaam samenwerkingsverband. Dus dank aan iedereen!

Binnen de universiteit zijn ook veel mensen die een woord van dank verdienen. Mijn collega's van Gezondheid en Maatschappij (G&M), van Sociologie van Consumenten en Huishoudens (SCH), van de sectie Communicatiewetenschap (COM)

en andere groepen bedank ik graag voor de prettige werkomgeving, de ondersteuning, de inhoudelijke discussies en vooral het plezier! In het bijzonder natuurlijk G&M: jullie zijn fijne collega's!

Tijdens de afgelopen vier jaar heb ik met plezier onderwijs verzorgd en studenten begeleid met hun bachelor scriptie, afstudeervak of stage. Jullie aanwezigheid is een bron van inspiratie.

De universiteit dank ik, omdat Gezondheid en Maatschappij er als nieuwe groep en studie is gekomen. Het is een kansrijk en relevant vakgebied!

Joke en Sjoukje, ik vind het geweldig dat jullie mijn paranimfen zijn en samen met mij op het podium in de aula zitten. Ik heb jullie in mijn eerste baan leren kennen. Het is fijn om elkaar zo lang te kennen en leuke dingen te doen. Joke, mede dankzij jou ben ik 'hier' gekomen. Ik zie uit naar nog meer avondjes in de sauna. Sjoukje, jij bent altijd geïnteresseerd, en in voor een fietstocht, een wandeling of wat anders. Blijven we doen.

Buiten de universiteit zijn er nog vele mensen die mij het leven leuk en zinvol maken. De mensen die mij fit en lenig houden door yogalessen te volgen en de mensen die mij laten lopen op de tennisbaan om de ballen terug te meppen. Mijn vrienden dank ik voor hun betrokkenheid, gezelligheid en geduld. Ik heb weer iets meer tijd!

De laatste woorden van dank zijn natuurlijk voor de familie. Martijn en Ria, jullie zijn er altijd voor mij en ons. (Schoon-) broers en zussen, het is fijn een grote familie te hebben.

Boris, Wijnand en Isabel, het is geweldig om drie zulke kanjers om mij heen te hebben. Ik ben trots op jullie en het is fijn om het zo gezellig met elkaar te hebben. Lieve Jasper Jan, je staat volledig achter mij en dat is een stevige basis. Ik ben heel blij dat je er altijd bent.

Dankwoord

About the author

Curriculum vitae

Maria Anna Elisabeth (Annemarie) Wagemakers was born on 7 June 1964 in Loon op Zand, The Netherlands. After secondary school, Annemarie started to study Human Nutrition at Wageningen University, with a special interest in health, health promotion, and social sciences, from which she graduated in 1988. After graduation, she worked as a researcher in the Department of Communication and Innovation Studies at Wageningen University. Her topics of research interest include 'women's health', 'women's re-entry into the workforce', and 'health promotion for pregnant women by midwives'. In 1995-1997 she also worked for the Women's Health Centre Aletta. In 1999 – 2001 she carried out participatory action research in the community program *Wijkgezondheidswerk* in Eindhoven.

From 2000 – 2006 she worked for the Expertise Centre Age and Life Course, where, amongst other things, she edited books entitled *Cost-effectiveness and the risk of age discrimination*, *The age factor in research*, and *Health and healthcare during the life course*.

In 2006, Annemarie returned to Wageningen University as an assistant professor at the Health and Society Group of the Social Sciences Department. As the group had just been set up when she joined, she contributed to the development of several courses. She coordinates the courses 'Health and the physical and social environment' and 'Coordinated action for health' and supervises bachelor and master students with their thesis. She lectured at the annual training course of the European Training Consortium Public Health and Health Promotion and participated in the international course on Salutogenesis, both courses of the International Union for Health Promotion and Education. Annemarie was engaged in the pilot project *Health Promotion Framework* of the Netherlands Institute for Health Promotion (NIGZ) (financed by ZonMw), in which she carried out research on methods and tools to facilitate and measure social support. In her research, she collaborates with the municipal health services in Eindhoven, Amsterdam, and Gelre-IJssel. Furthermore, she is involved in the Academic Research Collaborative, AGORA, as one of the project managers and contributes to community-based projects of the Netherlands Institute for Sport and Physical Activity (NISB) as an advisor and researcher.

List of publications

Journals

Wagemakers, A., Koelen, M.A., Lezwijn, J. and Vaandrager, L. (In press). Coordinated action checklist: A tool for partnerships to facilitate and evaluate community health promotion. *Global Health Promotion*.

Wagemakers, A., Vaandrager, L., Koelen, M.A., Saan, H. and Leeuwis, L. (In press). Community health promotion: A framework to facilitate and evaluate supportive social environments for health. *Evaluation and Program Planning*.

Mulder, E. and Wagemakers, A. (2010). 'De wijk: een bron van energie'. De sociale en fysieke omgeving in interventies ter preventie van overgewicht. *Tijdschrift voor Gezondheidswetenschappen*, 88: 108-111.

Naaldenberg, J., Vaandrager, L., Koelen, M., Wagemakers, A., Saan, H. and De Hoog, K. (2009). Elaborating on systems thinking in health promotion practice. *Global Health Promotion*, 16(1): 39-47.

Koelen, M.A., Vaandrager, L. and Wagemakers, A. (2008). What is needed for coordinated action for health? *Family Practice*, 25: i25-i31.

Wagemakers, A., Corstjens, R., Koelen, M., Vaandrager, L., Van 't Riet, H. and Dijkshoorn, H. (2008). Participatory approaches to promote healthy lifestyles among Turkish and Moroccan women in Amsterdam. *Promotion & Education*, 15(4): 17-23.

Wagemakers, A., Koelen, M.A., Van Nierop, P.W.M., Meertens, Y.E.G., Weijters, J.C.H.M. and Kloek, G.C. (2007). Actiebegeleidend onderzoek ter bevordering van intersectorale samenwerking en bewonersparticipatie. De ervaringen met het wijkgezondheidswerk in Eindhoven. *Tijdschrift voor Gezondheidswetenschappen*, 85: 23-31.

Wagemakers, M.A.E. and Quispel, Y. (2006). De variabele leeftijd in onderzoek: valkuilen voor onderzoekers. *Tijdschrift voor Gezondheidswetenschappen*, 84: 50-53.

Wagemakers, M.A.E. and Quispel, Y. (2006). De variabele leeftijd in onderzoek: wat betekent dit voorbeleid? *Tijdschrift voor Gezondheidswetenschappen*, 84: 115-117.

Wagemakers, A. and Wolffers, I. (2002). Wel slikken, niet testen. Ouderen worden vaak uitgesloten van geneesmiddelenonderzoek. *Medisch Contact*, 57: 1144-1146.

Alewijnse, D., Van Bavel, M.A.P. and Wagemakers, M.A.E. (2002). Seksespecifieke voorlichting. De vertaling naar de praktijk. *Tijdschrift voor Gezondheidswetenschappen*, 80: 225-230.

Brinkers, J. and Wagemakers, A. (2002). De rijbewijskeuring. De geloofwaardigheid van ouderen in het geding. Gerõn. *Tijdschrift over ouder worden en maatschappij*, 2002(4): 59-61.

Wagemakers, M.A.E., Van Woerkum, C.M.J. and Alewijnse, D. (2001). De factor sekse bij communicatiemodellen voor de gezondheidszorg. *Tijdschrift voor Gezondheidswetenschappen*, 79: 143-149.

Wagemakers, M.A.E., Den Broeder, L., Waelput, A. and Van Woerkum, C.M.J. (1999). Een communicatiebeleid voor de KNOV. *Tijdschrift voor Verloskundigen*, 24: 688-692.

Wagemakers, M.A.E., Den Broeder, L. (1999). Verloskundige zorg in de Praktijk. *Vrouw & Gezondheidszorg*, 8: 8-11.

Books

Wagemakers, A., Ubachs-Moust, J. and Christ, L. (red) (2005). T*ijd van leven, tijd van zorgen. Essays over leeftijd, levensloop, gezondheid en zorg*. Utrecht: Expertisecentrum LEEFtijd.

Wagemakers, A. and Quispel, Y. (2003). *Leeftijd & Onderzoek. De rol van leeftijd in onderzoek*. Utrecht: LBL, expertisecentrum leeftijd en maatschappij.

Bendijk, K., Mulder, A. and Wagemakers, A. (2002) *De rol van leeftijd in woonruimteverdeelsystemen. Leeftijd & Wonen*. Utrecht: LBL, expertisecentrum leeftijd en maatschappij.

Wagemakers, A., Van der Wijk, P. and Francissen, P. (red.) (2000). *Wanneer is het leven te kostbaar? Leeftijd en kosteneffectiviteit in de gezondheidszorg*. Amsterdam: Boom.

Röling, N.G. and Wagemakers, M.A.E. (Eds.) (1998). *Facilitating Sustainable Agriculture. Participatory learning and adaptive management in times of environmental uncertainty*. UK: Cambridge University Press.

Research reports

Wagemakers, A. and Vaandrager, L. (2007). *Modellen voor de sociale en fysieke determinanten van gezondheid*. In opdracht van het NISB ten behoeve van Pilot Project 'Overgewicht in de Wijk'. Wageningen: Gezondheid en Maatschappij, Wageningen Universiteit.

Saan, H., De Haes, W., Hekking, C. and Wagemakers, A. (2007a). *Handleiding Audit Referentiekader Gezondheidsbevordering. Deelrapport 2A*. Pilot Project Referentiekader Gezondheidsbevordering. Woerden: NIGZ.

Saan, H., De Haes, W., Hekking, C. and Wagemakers, A. (2007b). *Audit. Lang inhoudelijk gesprekksschema met doorvraagopties. Deelrapport 2B*. Pilot Project Referentiekader Gezondheidsbevordering. Woerden: NIGZ.

Wagemakers, A., Vaandrager, L., Koelen, M., Dijkema, P. and Corstjens, R. (2007). *Sociaal draagvlak Verslag van de uitwerking van 'sociaal draagvlak' voor het pilot project Referentiekader Gezondheidsbevordering*. Wageningen: Gezondheid en maatschappij, Wageningen Universiteit.

Wagemakers, A. (2003). *Vergrijzing en de kosten van de gezondheidszorg*. Utrecht: LBL, expertisecentrum leeftijd en maatschappij.

Wagemakers, A. and Koelen, M. (2001). *Samenwerken aan gezondheid. Een jaar verder*. Actiebegeleidend onderzoek in Eindhoven. Verslag van de tweede evaluatieronde. Wageningen: Leerstoelgroep Communicatie en Innovatie Studies, Wageningen Universiteit.

Wagemakers, A. (2000). *Samenwerken aan gezondheid*. Actiebegeleidend onderzoek in Eindhoven. Wageningen: Leerstoelgroep Communicatie en Innovatie Studies, Wageningen Universiteit.

Abstracts and presentations

Wagemakers, A. and Vaandrager, L. (2009). *Coordinated action checklist. A tool for partnerships to facilitate and evaluate community health promotion*. Poster presentation. HIA'09. On the move. Rotterdam: 14-16 October 2009.

Wagemakers, A. (2008). *Participatieve methoden: de ervaringen met actie onderzoek in wijkgericht gezondheidswerk*. Presentatie Methodologie, NOSMO, VU Amsterdam, 6 juni 2008.

Wagemakers, A. and Dijkema, M.T. (2008). Participatief onderzoek wijkgezondheidswerk Eindhoven Presentatie workshop 'Wetenschappelijke uitdagingen van collaborative research in gezondheidsbevordering. Nederlands Congres Volksgezondheid 2008. 9-10 April, Martiniplaza Groningen. *Tijdschrift voor Gezondheidswetenschappen*, 86: 16-17.

Wagemakers, A. and Vaandrager, L. (2008). Sociaal draagvlak in gezondheidsbevordering: methoden en instrumenten die evalueren en faciliteren. Presentatie. Nederlands Congres Volksgezondheid 2008. 9-10 April, Martiniplaza Groningen. *Tijdschrift voor Gezondheidswetenschappen*, 86: 54-55.

Wagemakers, A., Vaandrager, L. and Koelen, M.A. (2007). *Facilitating and evaluating commitment and participation in community-based projects for health promotion*. Presentation on the 19th IUHPE World Conference on Health Promotion & Health Education. Canada, Vancouver: June 10-15, 2007.

Wagemakers, A., Vaandrager, L., Koelen, M., Dijkema, P. and Corstjens, R. (2007). *Sociaal draagvlak, intersectorale samenwerking en doelgroepparticipatie*. Presentatie en Workshop. Het Referentiekader verder uitgediept. Tussentijdse Slotreferentie voor alle beleidsmakers, onderzoekers en uitvoerders van gezondheidsbevordering. WTC Rotterdam: 16 mei 2007.

Wagemakers, A., Van Gemert, A. and Koelen, M. (2006). *Participatory Action Research for Health Promotion. Poster presentation*. International Conference on Urban Health (ICUH), Amsterdam: 25-28 oktober 2006.

Completed Training and Supervision Plan

Description	Institute / Department	Year	ECTS*
Courses			
Basic Teaching Qualification (BKO)	Wageningen UR	2007-2009	5
Techniques for writing and presenting a scientific paper	Wageningen Graduate Schools (WGS)	2008	1.5
The Evidence Base of Salutogenic Research PhD Course (Post-Graduate level)	Helsinki Research Centre IUHPE[1], ETC-PHHP[2]	2008	5
Qualitative Data Analysis: Procedures and Strategies	YRM 60806 Wageningen UR	2008	4
ETC-PHHP International training course Reducing Health Inequalities (tutor). Community Action. Wageningen/Düsseldorf.	ETC-PHHP[2] Consortium European Master Program	2007	8
ETC-PHHP International training course Back to the future, Croatia	ETC-PHHP[2] Consortium European Master Program	2000	8
Presentations at conferences and workshops			
HIA'09. On the move.	HIA'09, Rotterdam	2009	1
Nederlandse Organisatie voor Sociaal-Wetenschappelijk Methodologisch Onderzoek	NOSMO, VU Amsterdam	2008	1
Nationaal Congres Volksgezondheid	Groningen	2008	1
IUHPE[1] conference	Vancouver, Canada	2007	1
Referentiekader Gezondheidsbevordering	Rotterdam	2007	1
International Conference on Urban Health	ICUH, Amsterdam	2006	1
International Conference Social Inequalities in Health Promotion	Copenhagen	2000	1
Teaching and supervising activities			
Course Coordinated Action for Health	SCH 30806 Wageningen UR	2006-2009	2
Course Health and the Physical and Social Environment	SCH 20806 Wageningen UR	2006-2009	2
Total (minimum 30 ECTS)			42.5

*One ECTS on average is equivalent to 28 hours of course work
[1] International Union for Health Promotion and Education
[2] European Training Consortium in Public Health and Health Promotion

This thesis is partly based on data gathered within different projects:

The pilot project *Health Promotion Framework*, carried out in 2007 and coordinated by the Netherlands Institute for health Promotion (NIGZ) and funded by the Netherlands Organization for Health Research and Development (ZonMw).

The community based intervention program *Wijkgezondheidswerk* funded by ZonMw.

The *Healthy Lifestyle Westerpark* program funded by ZonMw, the Westerpark neighborhood, Amsterdam home care, the Netherlands Institute of Sport and Physical Activity (NISB) and the Municipal Health Service Amsterdam.

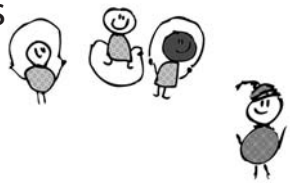
Cover design Kitty van der Veer, Proefschrift.nu
Layout Renate Siebes, Proefschrift.nu
Printed by Labor Grafimedia BV, Utrecht

Propositions

accompanying the doctoral dissertation of
Annemarie Wagemakers

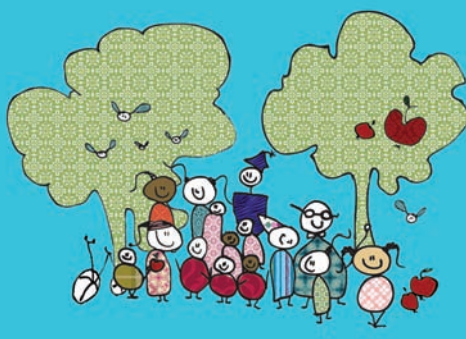
Community health promotion

Facilitating and evaluating coordinated action to create supportive social environments



1. The value of research can be enhanced when the research is part of the intervention (this thesis).
2. Health promotion benefits from combining assets and deficit approaches (this thesis).
3. Action research bridges the gap between practice, science and policy.
4. A competent health promotion professional is an expert in guiding learning processes.
5. If participation is an intervention objective it has to be evaluated as well.
6. Things that people do themselves are more worthwhile than things that others do for them.
7. Tenure track seriously damages the health of academic researchers.
8. Practice based evidence shows that yoga contributes to health.

Annemarie Wagemakers
Wageningen, 23 April 2010



Uitnodiging

Hierbij nodig ik u van harte uit voor
het bijwonen van de openbare verdediging
van mijn proefschrift

Community health promotion

Facilitating and evaluating coordinated action to create supportive social environments

Vrijdag 23 april 2010
om 13.30

in de Aula van de Wageningen Universiteit
Generaal Foulkesweg 1a, Wageningen

Aansluitend is er een receptie bij
Heerenstraattheater
Molenstraat 1b, Wageningen

Annemarie Wagemakers
Hazekamp 13, 6707 HE Wageningen
Annemarie.Wagemakers@wur.nl

Paranimfen
Joke Janssen
Joke.Janssen@wur.nl

Sjoukje Atema
Sjoukje.Atema@wur.nl