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To cite this article: Klasien Horstman (2020) Performing health promotion: an analysis of epistemic and political technologies of accountability, *Critical Public Health*, 30:5, 589-600, DOI: [10.1080/09581596.2019.1654600](https://doi.org/10.1080/09581596.2019.1654600)

To link to this article: <https://doi.org/10.1080/09581596.2019.1654600>



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Published online: 12 Aug 2019.



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Performing health promotion: an analysis of epistemic and political technologies of accountability

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ABSTRACT

The field of health promotion has developed at the interface of science and policy, resulting in programmatic tensions between the values of evidence-based and participatory approaches. This paper aims to go beyond debates between these positions, to develop an understanding of how health promotion practices are – unintendedly – performed and constructed by epistemic and political technologies of accountability. Drawing from Science and Technology Studies, the paper provides an in-depth qualitative analysis of two Dutch health promotion practices. The first presented itself primarily in epistemic terms, as an evidence-based project, while the other presented itself primarily in political terms, as a citizens' initiative. The analysis shows that while, in the first case, the specific epistemic design of health promotion as a randomized controlled trial performs robust international scientific credibility but a lack of local political credibility, the participatory approach of the second case performs robust local political credibility but meagre scientific credibility. The analysis makes clear that health promotion practices are – unintendedly – performed by situated entanglements of diverse technologies of accountability that operate on local, national and global scales, which can be aligned in diverse ways. More insights into these webs of accountability are required to improve health promotion through improving the cultures of accountability.

ARTICLE HISTORY

Received 22 January 2019
Accepted 5 August 2019

KEYWORDS

Health promotion;
performativity; technologies
of accountability; evidence -
participation

Introduction

The professional field of health promotion has intriguing ambiguities in its justification of programmes and interventions which aim to stimulate healthy living (Horstman, 2014). The Ottawa Charter (1986) articulated a broad view of health and stressed the importance of equity and community actions. However, more or less simultaneously, the field of health promotion and education sought to develop an epidemiological basis for identifying at-risk populations, socio-psychological models to develop interventions and statistical tools to evaluate the effects of these interventions (Armstrong, 2017; Buchanan, 2000). When, in the 1990s, the World Health Organization (WHO) introduced evidence-based health promotion as a strategy to account for the quality and impact of interventions (WHO, WHA51.12), this recommendation was received rather critically. Nutbeam (1999), for instance, argued that randomized controlled trials (RCTs) do not do justice to the complexity of health promotion interventions:

We should reject the clumsy and crude application of evaluation methods that have been designed for static forms of medical intervention, and promote the application of research methods that are relevant to the complexities of contemporary health promotion. (Nutbeam, 1999, pp. 99–101).

When it comes to publicly accounting for the impact of health promotion, Nutbeam's response reflects ongoing discussions about the meaning of evidence and the tensions between RCT studies that focus on effectiveness of interventions and participatory approaches aiming at empowerment of communities (Green, 2000; Green & Labonte, 2008; Minkler & Wallerstein, 2008; Raphael, 2000). These debates tend to justify health promotion in terms of representation: evidence is discussed in terms of the adequate representation of the effectiveness of interventions and participation is discussed in terms of adequate representation of specific voices in a community. To overcome the tensions between participatory and evidence based approaches, scholars have argued for balancing and bridging these two approaches (e.g. Cacari-Stone, Wallerstein, Garcia, & Minkler, 2014; Mayan & Daum, 2016; Rifkin, 2014). However valuable these proposals, the field of health promotion is still struggling with the divide between science and politics.

In this paper I introduce another angle to these discussions by analysing how different technologies of accountability – unintendedly – *perform* (Bauer, 2013; MacKenzie, Muniesa, & Siu, 2007; Meershoek & Horstman, 2016) everyday practices of health promotion and specific types of credibility. Instead of analysing whether epistemic or political technologies adequately represent health promotion practices, I focus on the ways in which these technologies of accountability *construct* practices of health promotion. I provide an in-depth analysis of two health promotion practices in the Netherlands, one of which presented itself as an evidence based intervention, while the other presented itself as a citizens' initiative.

The performativity of technologies of accountability

According to Bovens and Schillemans (2014) public accountability refers to practices of counting and accounting of 'matters of public concern' in a transparent way. In line with that, Warren has argued that democratic practices can be understood as 'webs of accountability' (Warren, 2014, p. 39). From the perspective of science and technology studies, one can argue that these webs of accountability consist of both political technologies of accountability, such as elections, checks and balances, and formats for citizen participation; and epistemic technologies of accountability, such as methodological conventions.

Important insights for understanding the interwovenness of political and epistemic technologies of accountability in public practices like health promotion, can be found in Porter's (1995) work *Trust in Numbers. The pursuit of objectivity in science and public life*. Porter studied the historical shaping of a particular scientific regime and a democratic political culture in western countries in the 20th century. He shows that an increasingly pluralistic democratic political culture went together with a rise in quantitative, epistemic ideals and practices. A rise in public controversies surrounding public policies and budgets resulted in an increasing call for public accountability, and, as a result, numbers became a technology of public trust. Numbers were associated with objectivity and impartiality and public policies increasingly had to be accounted for by statistics. As an effect, the social status of statistical expertise increased at the expense of qualitative expertise. Intriguingly, this impact of the rise of quantitative epistemic ideals did not last. In the longer run, driven by processes of increasing democratisation, numbers could not fulfil the need for public accountability as they, too, became disputed. As other scholars have argued, the 'scientification' of public policy often goes hand in hand with the 'politicisation' of scientific knowledge (Hoppe, 1999; Moes, Houwaart, Delnoij, & Horstman, 2017; Weingart, 1999) and a decrease in the self-evident credibility of quantitative techniques of public accountability.

MacKenzie et al., 2007 have argued that *epistemic* technologies of accountability, instead of neutrally describing realities, perform realities. They suggest that, for instance, concepts, tools and devices of economists do not describe markets but perform markets. In line with this, Bauer (2013) analysed how epidemiological techniques in the field of genomics, by using processes of modelling, recombining data and categorization, do not describe how genes may affect health, but perform a new genetic framing of public health. Meershoek and Horstman (2016) showed how

public health knowledge institutions, by designing questionnaires, applications, diagrams and other tools to monitor employee fitness on a regular basis, produce an occupational health metrics that performs a reality of 'vital' and 'less vital' employees, and new company policies that respond to and reproduce that reality.

Other scholars (e.g. Lezaun, Marres, & Tironi, 2017) have analysed the performativity of *political* technologies of accountability. Political technologies do not represent but perform publics, collectives and citizens. Turnhout, van Bommel, and Aarts (2010) argue: 'participation does not merely serve as a neutral place in which citizens are represented, but instead creates different categories of citizens. Recognizing this means reconceiving participation as performative practice.'(p. 26). In line with this, Van Reybrouck (2016) argues that the technology of general elections of party-members performs democracy and political representation in a different way than, for instance, a lottery of citizen-representatives. In the first case politicians become professionals that have an interest in maintaining their position and, unintendedly, develop distance to the voters. In the latter case politicians can focus on political aims as they only are in politics for a short while to do a public service.

Science and Technology Studies scholarship has convincingly shown that neither epistemic nor political technologies of accountability provide neutral representations of realities (Dehue, 1995). On the contrary, interwoven in complex webs of accountability, these epistemic and political technologies of accountability co-perform the practices they aim to account for. Before analysing how this applies to the case for health promotion, I explain the methodology that was used.

Studying health promotion practices

The first case, Heartbeat Limburg (1998–2005), was a large-scale collaborative prevention programme conducted by the regional public health service that works for five municipalities in the south of the Netherlands, a region with approximately 180,000 inhabitants. The aim of the program was to decrease the risk of cardiovascular disease (CD), the prevalence of which was higher in that region than in other parts of the country. The project was considered very innovative in combining an approach for high-risk patients in hospitals and general practice (life style counselling and health information) with a community approach for the general population including lower social economic status (LSES) groups (health information and almost 300 intervention activities). In 2000 Heartbeat Limburg was selected by the WHO as a demonstration project for its Towards Unity For Health approach. (<https://www.who.int/hrh/documents/en/TUFH2Oct00.pdf>). Four doctorate (PhD) studies were conducted to evaluate the effectiveness of the high-risk strategy (questionnaires, measurements of blood pressure, cholesterol and Body Mass Index), the effectiveness and procedure of the population strategy (questionnaires and telephone interviews), the cost-effectiveness of the project, and project governance. Although the evaluations showed some small positive short-term effects (e.g. intention to change, decline of fat intake), no long-term effects of the interventions were found.

The second health promotion project, Health Race Laarbeek (2010-ongoing), is also based in a municipality in the south of the Netherlands, but takes place in a single municipality (Laarbeek). It is presented as a participative citizens' initiative: '*Meant for and developed by inhabitants of Laarbeek*' is the slogan used on websites, in leaflets and in the media. The original Health Race underwent several changes and developed in 2018–2019 into Health Race 3.0. It started with inhabitants of the municipality, then, later, commercial parties became engaged, and in 2018–2019 sports organisations had an important role. While Heartbeat Limburg was developed at a time when the quest for evidence-based public health was at a high point in the Netherlands (Bolt, 2015), Health Race Laarbeek started in 2010, when the ideal of citizen participation was on the rise. It will become clear that this changing context is quite important in the performance of the projects.

The analysis of Heartbeat Limburg is based on an in-depth ethnographic study, carried out between 2002 and 2005 with the aim to empirically study the ethics of the prevention project in terms of everyday relationships between participants and professionals and their ideas about

'health' and 'a good life'. The research team, which was led by me, further consisted of one senior and one junior researcher, and studied a variety of project documents (minutes, leaflets, draft proposals, theses, and scientific publications). Additional information was acquired through participation of the main researcher in project meetings of Heartbeat Limburg over a period of two years, and through participative observations during health promotion activities such as hiking, line dancing, yoga, food parties, conducted by the research team over a period of eight months, particularly in disadvantaged neighbourhoods. We also conducted semi-structured interviews with local policymakers (13), with professionals such as general practitioners, social workers, cardiologists and hiking coaches (23), and with participants (55). Finally, we conducted two focus group interviews with local volunteers (eight and six participants, respectively). The data were thematically analysed and the results were discussed with the Heartbeat Limburg team to enable team members to give feedback. The study was published as a book (in Dutch) providing insights into the experiences of public health staff, professionals, citizens and policy makers with this project from an ethical perspective (Horstman & Houtepen, 2005). For the present article, I analyse the rich data again, this time focusing on technologies of accountability.

Health Race Laarbeek, which is an ongoing event, was studied much less extensively. The analysis of this project is based on a number of documents, including descriptive research reports of the Health Races of 2010 and 2011–2012 (Dijkema, 2012; Gemeente Laarbeek, 2013). In addition, the main researcher did fieldwork (2010–2017) on special annual occasions (e.g. at the start and the end of a race, and during the evaluation of several versions). She also had informal conversations with participants, and did interviews with the responsible Alderman (member of the municipal assembly), policy staff and public health workers. The Alderman, a policy advisor and two staff members of the public health office provided feedback on the draft of this paper.

Heartbeat Limburg: 'an evidence-based project'

Epistemic and political technologies of accountability operated in a specific way in the everyday workings of Heartbeat Limburg. The idea to design a large scale prevention project was born in politics: one of the Mayors in the region, concerned about the relatively poor health of the population, initiated the idea. The interest of local politics in regional health promotion was expressed in the co-financing of Heartbeat Limburg by the five municipalities where the interventions took place. From the start, the project was delegated to and owned by a 'scientific committee', which consisted of academics and professionals. This committee and scientific funding bodies (the Dutch Heart Foundation and the Netherlands Organisation for Health Research and Development) structured the project as an academic, evidence-based intervention. In keeping with the epistemic culture of quantitative knowledge ideals which was even more prevalent in Dutch health care and health research funding bodies than elsewhere (Bolt, 2015), Heartbeat Limburg was designed as a randomized controlled trial (RCT). To account for the project's results, project members selected a control region in another part of the Netherlands and designed highly standardised interventions to facilitate the measurement of the effects of the interventions.

The project's RCT design performed the health promotion practice and its public presentation in key ways. First, one of the innovative elements, lifestyle counselling with coronary heart patients, was standardised to cover six half-hour meetings. In practice, however, lifestyle counsellors felt uncomfortable with this design, as they believed much more time was needed to develop a relationship in which private matters such as diet, stress and anxiety could be discussed. As one lifestyle counsellor expressed:

For difficult cases, these six meetings are not enough, then you have to tinker with the instructions. . . . If the research requires me to end it while the patient needs more time, we choose for the patient. When you are in the middle of helping a patient to quit smoking, you cannot tell them: "I'm sorry, but the study is finished now, so you'll have to take care of yourself".

Thus, whereas in the public presentation counselling comprised six meetings, in practice counsellors adapted this number to accommodate patients' needs. Some got more, others less.

Second, the RCT design pushed the interventions to focus on CD and three main risk factors, smoking, a high-fat diet and lack of exercise. This choice was not made in conjunction with local communities but was based on epidemiological knowledge and negotiated with the main funding body, the Dutch Heart Foundation. This organisation stressed the importance of *'hard measures'* and of *'quantifying the aims'* of the project (Minutes 1 October 1996). Accordingly, in the grant proposal, the aims of the project were formulated in terms such as *'30% more reduction of high risks for CD compared to the control group'* and *'6% more reduction of fat intake compared to the control group.'* An analysis of several drafts of the grant application showed that the project team had at one point also suggested a focus on the reduction of stress, which is often experienced by people in disadvantaged neighbourhoods. However, the Heart Foundation, celebrating the ideals of evidence-based medicine, considered this factor to be too opaque and immeasurable, and as such saw it as a jeopardy to the project's accountability in terms of evidence. As a result, stress was not addressed in the interventions.

How temporal regimes of research designs relate to the temporal regimes of everyday life is an important but understudied theme. In the case of Heartbeat Limburg it appears that the quantitative epistemic culture of accountability largely determined the temporality of the interventions in particular and of the project as a whole in general. The Dutch academic convention that allots four years for a PhD, meant that about two and a half years were available for interventions and data collection, and as such determined the organisation of interventions. Some of the participants were annoyed when activities such as line dancing and aerobics were suddenly discontinued while they had enjoyed them and had made them a part of their weekly life. Social work professionals also questioned the timeframe, as they believed that behaviour change requires more sustainable programmes and more time. One public health professional and project team member reflected in an interview: *'We should have been more careful with the neighbourhoods, and we should not have raised expectations.'*

To further the goal of reducing specific risks, Heartbeat Limburg made an agreement with the regional social welfare agency to assign social workers to carry out the interventions in disadvantaged neighbourhoods. The project called for the social workers to spend half of their time in disadvantaged neighbourhoods to supervise activities related to reducing the risks of smoking, a high-fat diet and lack of exercise. Whereas in their regular work they tried to respond to residents' needs, the RCT procedure now forced them to address specific health risks instead. In one interview, a social worker explained, *'This was difficult, as we were used to listening to people's experiences and needs.'* Another said, *'People in this target group have other things on their minds, so you can put healthy living first, but they have completely different priorities. Health does not have the slightest priority.'* This being the case, one social work professional admitted, *'I'm finding it more and more complicated to discuss fruit and vegetables knowing that they do not have the money to buy these.'* Smoking was considered an especially touchy subject: *'Sometimes people became really angry; for instance, when we discussed smoking in the company of small children.'* In practice, professionals therefore avoided this topic and filled the time dedicated to the topic of smoking in other ways. Social work professionals felt that the interventionist method of Heartbeat Limburg threatened their relationships with the residents as well as the effectiveness of their social work: *'We do get requests from the neighbourhood, and now we have to say no to them. I find that difficult, as I may be damaging the relationship with the community. We have worked hard for a long time to develop this relationship, and now we have to say no.'* The standardised questionnaires were also a problem, as one social worker confessed: *'People do not understand all these questions. ... Sometimes we adapted them.'* The epistemic accountability of Heartbeat Limburg required social work professionals to act in a way that threatened their the success of their work in the neighbourhoods. Some members of the Heartbeat team noted the dilemmas of social work professionals during an interview: *'That is the dilemma of RCTs. ... The research was a precondition for starting the project, but it does affect how you work in practice.'*

The performativity of the epistemic-political accountability web in which Heartbeat Limburg took place, had specific consequences for the project. As a regional health promotion project, Heartbeat Limburg was developed at the intersection of science and local politics: a quantitative scientific approach was considered to confer a mark of quality. It played a major role in convincing local politicians to financially support the project at the start, but this scientific approach did not persuade them to support continuation of the project later on. As one local politician stated, *'On the political agenda, it has no priority.'* Another said, *'At the level of the municipality, public health is a vague topic. It is far removed from local politics. ... At one point, a council member asked whether it wouldn't be preferable to spend the money on AEDs [Automated External Defibrillator] in the municipality.'* While the epistemic accountability at first was aligned with local political accountability, the context of upcoming local elections later revealed the connection between science and local politics to be a rather fragile one. The focus on quantitative evidence, though acclaimed internationally, apparently decreased the value of the health promotion project in terms of local political accountability: politicians could not explain to citizens why they would continue to finance Heartbeat Limburg while citizens called for lampposts in the streets and help for the elderly.

The RCT design of this health promotion project created dilemmas with respect to scientific quality as well as with respect to ethical values, but it did not allow for reflection beyond the formal research aims. It was a mere coincidence that our study provided stakeholders with feedback, but the RCT design of preventive interventions did not allow to make changes on the basis of that feedback. Measurements focussed primarily on effects relating to the project's formal aims, and did not provide insight into the unintended consequences or the pragmatics of the project. The messy and complex everyday work of compromising and improvising, as well as the costs and benefits of this tinkering were not made public (Wolters, Wert, Schayck, & Horstman, 2018). The appreciation that WHO showed for the Heartbeat Limburg project by selecting it as a demonstration project is a reflection of the fact that the project is constructed as a 'public' issue among international health policy bodies rather than among local communities.

Health race Laarbeek: 'a citizens initiative'

Like Heartbeat Limburg, the Health Race Laarbeek also originated in local policy: an Alderman decided to organise public meetings and invite municipal residents to provide ideas for local public health policy. The residents were offered a choice of several themes by the regional public health service to help them along. Two residents, however, came up with a completely new, unexpected idea. Inspired by a popular programme on national television, they proposed organising a diet competition between the municipality's four villages, in which the village that lost the most weight in one year would be declared the winner. Although this idea received the most support from other residents, the municipality and the regional public health service did not consider this to be a very healthy strategy. As the Alderman nonetheless felt obliged to take the idea seriously, a meeting was held to discuss it. In a 'heated discussion', as one public health professional called it, the involved parties agreed to reimagine the diet competition as a Health Race – a race to become the fittest village in the municipality. This Health Race has been the spearhead of local public health policy since 2010 and has always been presented as a citizens' initiative in which residents have taken the lead, a characteristic which serves as a major justification. The Health Race was primarily shaped through local participatory technologies of accountability, and this affected health promotion practices in several ways.

First, its participatory character meant that the concept of health was not predefined in this initiative. The Alderman sometimes stated that *'fitness is in your body and in your mind'*, but this expression was meant to broaden the meaning of health rather than to limit it. The Health Race was organised as an annual nine-month competition between teams of around twelve members each. In the first three versions, four teams participated, one for each village: in the fourth edition – the 'Health Race 2.0' – the teams were formed by various voluntary organisations such as sports

clubs, a Catholic seniors association and a local broadcasting club. For the Health Race 3.0 (2018–2019), some changes were made. Most people participated to ‘socialise’ or ‘meet new people’. One man stated, *‘I was surprised to discover so many people I didn’t know in this small village’* (Dijkema, 2012, p. 7).

The rules developed for the race did, of course, mention health. It was decided that teams could score points based on individual performance on indicators of health (for instance, health checks at the beginning and end, public health quizzes and an activity tracker). During the first edition, individuals could also win points by losing weight. Notably, however, this component was left out in later editions as it did not meet people’s diverse motives for taking part. The fact that the largest number of points could be scored by organising health activities and engaging other residents who were not part of the team, was a crucial aspect of the Health Race. Points were awarded for activities that contributed to a healthy lifestyle, that easily fit into people’s everyday lives and that were innovative (such as cleaning windows for seniors), but the way in which the activities were carried out, was left up to the teams and the jury. Activities organised by the teams – totalling 102 activities with more than 13,000 participants in the 2011/2012 edition (Dijkema, 2012) – varied from handing out healthy snacks during Carnival celebrations to group hikes and weekly walks with wheelchair-using seniors, and from making greeting cards to organising fitness exercises in a music garden and sports for young people. The diversity of the teams and jury prompted discussions on topics such as whether or not salmon and cheese are healthy, the risks and benefits of running, the impact of loneliness and so on. By leaving open the definition of health, the Health Race became a public space for the exchange of diverse local knowledges.

Second, even though participants in these discussions may have referred to scientific claims about healthy living or consulted public health professionals for advice, health promotion sciences as such did not play a direct role in the Health Race. And this was exactly the aim of the Alderman, as he explained in an interview: *‘People are and should be the owners of their own health. People take care of what they consider to be their own, so ownership is key.’* In several conversations and presentations, he referred to the damaging effects of bureaucratic, distrusting, box-checking accountability cultures and stressed the importance of ownership by and trust in citizens. To explain the importance of ownership, he often referred to the Law of Maier ($E = Q \times A$, or Effect = Quality multiplied by Acceptance). I observed how he then drew an X and a Y-axis, respectively referring to quality or evidence and acceptance or participation, to indicate that no amount of evidence on the quality of interventions will lead to positive results if there is no acceptance and participation. So, from the perspective of participative accountability, scientific evidence was not a priority. This focus on trust and ownership was also underlined by the decision of the municipality to give the teams a small amount of money to organise activities, which they were free to spend without having to account for it or provide invoices.

Health Race Laarbeek did not set any goals with respect to health or participation. As ‘ownership’ was an important ideal in the political philosophy of the Health Race, setting quantitative aims for participation would be foolish. In play, new activities, behaviours and social relations can be experimented with without the pressure of having to account for success or failure (e.g. McMahon, Lytle, & Sutton-Smith, 2005). The Health Race, as a narrative about change, illustrates these ideas about play. There were no targets in terms of specific health benefits, risk reduction or participation; rather the team members and other participants determined what had to be achieved in the shorter or longer term. Even winning or losing the contest was not considered a grave matter. In the Health Race, processes were more important than outcomes. The playful character of the Health Race was highly appreciated by participants as it was associated with a challenge, togetherness and fun (Dijkema, 2012, p. 12). On many occasions, I observed that participants presented their participation in a playful light as well. During the final meeting of Health Race 2.0, teams presented their year of activities in a format with no requirements other than a five-minute limit. The diverse presentations testified to the fun the teams experienced and included many funny and ironic comments on the activities, such as about becoming intimately

acquainted with the weather forecast when hiking. Moreover, there was also room to express disappointment about activities that had attracted few participants but had taken lots of energy to organise (observation 12 May 2017). In the context of play, all kinds of experiences were allowed to be publicly expressed.

In line with the participative accountability of the Health Race, the decision which village would be awarded the title of 'the fittest village of Laarbeek' was made by a jury that consisted not of experts but of fellow residents from all villages, among whom were 'experienced participants' from previous editions, and residents who smoked or were overweight. When I specifically probed aspects of inclusion and diversity in the Health Race, a team captain said that he expressly invited 'vulnerable' residents to participate in order to 'get them out of the house', one of whom came out as a transvestite during the Health Race and subsequently started performing at pubs and parties. Someone else alerted me to a young woman who became a jury member who had blue and green hair, which is not very common in Laarbeek. The fact that the teams and part of the jury change every year helps to prevent in-crowd mechanisms.

Fifth, the Health Race not only had its beginnings in public policy but was also evaluated in public. It is telling that the annual evaluation of the Health Race takes place in the town hall, where thoughts on what went well and what should change in the next edition are shared over healthy smoothies. Indeed, new elements, such as rescheduling the competition to run from September to July instead of January to December to avoid the summer holidays, introducing vouchers to encourage people to buy healthy products from local shops and to simultaneously engage local retailers in this public health policy, and involving local voluntary organisations, were introduced with each edition. The chosen approach to evaluation has enabled annual adaptations and adjustments, and has publicly demonstrated that feedback is taken seriously.

The participatory technology of accountability that shaped the Health Race allowed policy staff and public health professionals to attune to the day-to-day experiences of the Health Race: they informally tracked some of the teams' activities, which enabled them to mediate and offer support where deemed necessary. The research report mentioned 'a humble role for professionals: trust and let go' and 'easily accessible support' as effective elements of the Health Race (Gemeente Laarbeek, 2013), although these wordings may underrepresent the actual efforts of policy staff and professionals to provide continuity over the years and establish what it means to 'trust and let go'. Whereas some of the teams were 'self-managing', others had chosen a kind of team leader or leaders. Some of these team leaders took their role too seriously, rigorously pushing and attempting to motivate team members to the appreciation of some but the annoyance of others. When such teams experienced minor conflicts over what to do and how to do it right, policy staff assisted behind the scenes to prevent them from falling apart.

Though primarily a participatory project, there came a point when the Health Race too became confronted with specific epistemic conventions in the Dutch health research culture. The municipality and public health service of Laarbeek decided to apply for funding to gain scientific insight into the impact of the Health Race. However, to be eligible for funding, the project had to be an evidence-based intervention registered with the Dutch Recognition System for Health Promotion, a national quality control database for interventions (Brug et al., 2010). The Health Race was not included in the database, but after several phone calls with the funding body it became clear that the Health Race could apply for funding as 'a practice-based intervention'. The proposal was sent in and received one positive and one critical review. It is striking that the latter focussed on Dutch epistemic conventions in health promotion, that were not operative in the Health Race. While the Health Race was essentially an open participatory process in which people could decide to initiate activities at any moment, the author of this critical review preferred a more clearly described intervention and required scientific expertise on behaviour change to be present in the research team. S/He commented:

It is not clear exactly which aims (choice of healthy lifestyle, obesity, alcohol, intoxication, recreational substances) will be selected and ... Because no interventions are mentioned, it is unclear whether the aims (increase of citizens' healthy lifestyle) will be reached. ... More than participation is needed to enable behaviour change, namely solid knowledge of the determinants of behaviour change among different target groups and knowledge of techniques.

Finally, funding was assigned for a small qualitative study of the experiences of participants with Health Race.

In line with the funding body's epistemic requirements, the results of the study should enable generalisation to allow for inclusion of the Health Race in the aforementioned database. At that time, the Dutch Journal of Health Sciences started discussing the tensions between statistical norms for evidence and the complexity of health promotion interventions, resulting in the addition of 'effective elements of interventions' to the ideal of 'evidence-based interventions' (Van Oers, 2015). In line with this adjustment, the final title of the report read: '*Guidance for health promotion through a citizens' initiative. Description of the methodological approach and effective elements of the Health Race Laarbeek*' (Gemeente Laarbeek, 2013). This wording of the title neatly illustrates how a citizens' initiative, providing a playground for new behavioural repertoires and celebrating a philosophy of ownership, was transformed into a method – consisting of several standardised elements and dos and don'ts – which had been disconnected from its local context. It was because of this disconnection that the Health Race was eligible for incorporation in the database, but only as a 'well-described' intervention, which is the database's lowest classification of effectiveness.

Over the years, Health Race Laarbeek constructed municipal practices of citizen participation and ownership. The credibility of this approach became clear when the Alderman's party did well in the municipal elections and the Alderman was reappointed. Moreover, when the municipality proposed ending the Health Race after three editions for fear of overburdening residents, these residents took action themselves and set up the Health Race 2.0, and later on, 3.0., which again were supported by the municipality. Perhaps even more significant is the fact that the participatory experiences in the Health Race were translated into other policy domains, for instance the execution of the Social Support Act, which provides support for older and vulnerable people. Here, too, the municipality invited small groups of citizens to discuss how to shape this policy practice, and the Alderman resisted the formal requirement of the national government to do a municipal survey to evaluate clients' experiences with the Social Support Act, because he preferred a qualitative evaluation.

Calibrating webs of accountability to everyday life

Democracy implies that webs of accountability perform matters of public concern. The current study shows how health promotion practices as 'matters of public concern' are performed by historically constructed local-, national- and global entanglements of epistemic and political technologies of accountability. Heartbeat Limburg embodied scientific authority and, based on the RCT design and its scientific output, the project established credibility in the international public health community that shared this epistemic ideal. However, this epistemic approach did not construct local participatory spaces that could have 'proven' the project's value in local communities and in the local political arena, and therefore the project lacked local public credibility. From the perspective of sustainability, one may argue that epistemic and political technologies of accountability at play on multiple levels in Heartbeat Limburg were not enacted in a way that allowed them to work together very well. Because of this misalignment, in local democratic procedures it was decided not to continue Heartbeat Limburg. The Health Race, which was established ten years later, was performed by political technologies of accountability – frequent policy-citizen interaction, public meetings, public jury, public rules – which prioritised the dynamics of local knowledges and experiences, and celebrated inclusion, ownership and change without setting strict standards or clear aims. As such, it created trust relationships between citizens, public health professionals and local policy and it generated local support for participatory

approaches in policy fields beyond public health. The choice for a rather descriptive qualitative study to grasp the everyday practice of the Health Race fitted these local relationships. In this case, epistemic and political technologies of accountability appear to be aligned rather well. While Heartbeat Limburg gained credibility in the scientific world while lacking local engagement and continuity, Health Race Laarbeek, albeit a meagre scientific reputation, did develop robust local credibility and sustainability.

I did not aim to evaluate these differences by using a normative theory for 'good health promotion'. I chose the angle of performativity as this helps to get insight in how historically constructed webs of accountability become inscribed in health promotion initiatives and co-construct the everyday realities of health promotion, beyond the intentions and aims of health promotion experts. The focus on performativity is especially fruitful to study how political and epistemic technologies of accountability, – not being neutral – perform the practices that they aim to account for *and* affect what is made publicly known about these projects and what remains black boxed and untold (Murphy, 2006; Wolters et al., 2018). The focus on performativity puts a lens on practical dynamics, back offices and unintended consequences of health promotion that often remain unstudied. My analysis suggests that the epistemic accountability of Heartbeat Limburg makes professional tinkering and citizens' work invisible, while the political accountability of Health Race Laarbeek tends to underestimate the crucial work of policy staff and professionals in enhancing citizens' participation. This perspective of performativity of accountability technologies can be fruitfully used to analyse other public health programmes – from life style change to vaccination – and their unintended consequences as well.

Observing the 'collateral damage' of accountability procedures in public life, Bovens and Schillemans argue that we must question 'what kinds of accountability are relevant and the conditions and contexts in which they are effective.' (Bovens & Schillemans, 2014, p. 674). They argue that to accommodate *meaningful accountability* less defensive accountability procedures calibrated to fit specific local practices should be developed. The argument of 'collateral damage' also holds for the field of public health where quantitative epistemic ideals and practices are still very dominant. Adams (2016) argues that reflection is needed on what is counted and made visible in global health, as metrical data practices that aim to account for quality and costs can violate every day health practices, for instance by investing time and money in actions that do not benefit people's health or do not address people's needs. In their work Smith (2013); Smith et al. (2016) argue that while the public health sector in the UK has invested much in producing epidemiological evidence to back up policies to reduce health inequalities, health inequalities actually grew. In line with Bovens and Schillemans, Adams explicitly calls for developing 'alternative ways of accounting' that are less damaging (Adams, 2016, p. 230). Both Adams and Smith et al. call for methodologies that do more justice to everyday life worlds, like anthropology and natural experiments. Bell and Aggleton (2016) argue for ethnographic approaches to monitor and evaluate health and social development, as these will provide more insight and are more responsive to local communities.

My analysis of health promotion supports this line of thought, but also makes clear that more is required to develop 'good health promotion'. It is important to go beyond critiquing quantitative epistemic ideals and to go beyond discussing tensions between evidence and participation, in order to unravel how multiple entangled webs of diverse accountability techniques perform health promotion designs and practices and identify how to improve health promotion through developing new webs of epistemic-political technologies of accountability. This not only requires rethinking the concepts and methods of health promotion, but also rethinking the infrastructural, global-local, scientific-political networks of data systems, performance indicators, funding schemes, and policy priorities.

Disclosure statement

No potential conflict of interest was reported by the authors.

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References

- Adams, V. (Ed.). (2016). *Metrics. What counts in global health*. Durham: Duke University Press.
- Armstrong, D. (2017). Clinical prediction and the idea of a population. *Social Studies of Science*, 47(2), 288–299.
- Bauer, S. (2013). Modeling population health. Reflections on the performativity of epidemiological techniques in the age of genomics. *Medical Anthropology Quarterly*, 27(4), 510–530.
- Bell, S., & Aggleton, P. (Eds.). (2016). *Monitoring and evaluation in health and social development. Interpretative and ethnographic perspectives*. Oxon: Routledge.
- Boht, T. (2015). *A doctor's order: The Dutch-case of evidence-based medicine (1970–2015)*. Antwerpen-Apeldoorn: Garant.
- Bovens, M., & Schillemans, T. (2014). Meaningful accountability. In M. Bovens, R. E. Gooding, & T. Schillemans (Eds.), *The Oxford handbook of public accountability* (pp. 673–682). Oxford: Oxford University Press.
- Brug, J., Dale, D., Van Lanting, L., Kremers, S., Veenhof, C., Leurs, M., ... Van Kok, G. (2010). Towards evidence-based, quality-controlled health promotion: The Dutch recognition system for health promotion interventions. *Health Education Research*, 25(6), 1100–1106.
- Buchanan, D. R. (2000). *An ethic for health promotion: Rethinking the sources of human wellbeing*. Oxford: Oxford University Press.
- Cacari-Stone, L., Wallerstein, N., Garcia, A., & Minkler, M. (2014). The promise of community-based participatory research for health equity: A conceptual model for bridging evidence with policy. *American Journal of Public Health*, 104(9), 1615–1623.
- Dehue, T. (1995). *Changing the rules: Psychology in the Netherlands 1900–1985*. Cambridge: Cambridge University Press.
- Dijkema, P. (2012). *Resultaten van de Gezondheidsrace. GGD Brabant-Zuidoost. Handreiking voor gezondheidsbevordering vanuit burgerinitiatief. Beschrijving van de methodische aanpak van werkzame elementen van de Gezondheidsrace Laarbeek* [Results of the Health Race. Public Health Service Brabant-Southeast. Guide for health promotion based on a citizen's initiative. Description of the method and effective elements of the Health Race Laarbeek]. Helmond: GGD Brabant-Zuidoost.
- Gemeente Laarbeek. (2013). *Handreiking voor gezondheidsbevordering vanuit burgerinitiatief* [Guide for health promotion based on a citizen's initiative]. Laarbeek: Author.
- Green, J. (2000). The role of theory in evidence based health promotion. *Health Education Research*, 15(2), 125–129.
- Green, J., & Labonte, R. (Eds.). (2008). *Critical perspectives in public health*. London: Routledge.
- Hoppe, R. (1999). Policy analysis, science and politics: From “speaking truth to power” to “making sense together”. *Science and Public Policy*, 26(3), 201–210.
- Horstman, K. (2014). Struggling with science and democracy: Public health and citizenship in The Netherlands. In F. Huisman & H. Oosterhuis (Eds.), *Health and citizenship: Political cultures of health in modern Europe* (pp. 191–208). Oxon: Pickering & Chatto, Routledge.
- Horstman, K., & Houtepen, R. (2005). *Worstelen met gezond leven. Ethiek in de preventie van hart en vaatziekten* [Struggling with healthy living. Ethics in prevention of coronary heart diseases]. Amsterdam: het Spinhuis.
- Lezaun, J., Marres, N., & Tironi, M. (2017). Handbook of science and technology studies. In U. Felt, R. Fouché, C. Miller, & L. Doerr-Smith (Eds.), *Experiments in participation* (pp. 195–222). Cambridge: MIT Press.
- MacKenzie, D., Muniesa, F., & Siu, L. (2007). *Do economists make markets? On the performativity of economics*. Princeton: Princeton University Press.
- Mayan, M. J., & Daum, C. H. (2016). Worth the risk? Muddled relationships in community-based participatory research. *Qualitative Health Research*, 26(1), 69–76.
- McMahon, F. F., Lytle, D. E., & Sutton-Smith, B. (Eds.). (2005). *Play: An interdisciplinary synthesis. Play and culture studies* (Vol. 6). Maryland: University Press of America.
- Meershoek, A. M., & Horstman, K. (2016). Creating a market in workplace health promotion: The performative role of public health sciences and technologies. *Critical Public Health*, 26(2), 269–280.
- Minkler, M., & Wallerstein, N. (Eds.). (2008). *Community based participatory research for health. From process to outcomes*. San Francisco: Wiley.
- Moes, F., Houwaart, E., Delnoij, D., & Horstman, K. (2017). Contested evidence. A Dutch reimbursement decision taken to court. *Health, Economy, Policy and Law*, 12(3), 325–344.
- Murphy, M. (2006). *Sick building syndrome and the problem of uncertainty: Environmental politics, technoscience, and women workers*. Durham: Duke University Press.
- Nutbeam, D. (1999). The challenge to provide ‘evidence’ in health promotion. *Health Promotion Int*, 14(2), 99–101.
- Porter, T. (1995). *Trust in numbers. The pursuit of objectivity in science and public life*. Princeton: Princeton University Press.
- Raphael, D. (2000). The question of evidence in health promotion. *Health Promotion Int*, 15(4), 355–367.

- Rifkin, S. (2014). Examining the links between community participation and health outcomes: A review of the literature. *Health, Policy and Planning, 29*(S2), ii98–ii106.
- Smith, K. E. (2013). *Beyond evidence based public health. The interplay of ideas*. Basingstoke: Palgrave Macmillan.
- Smith, K. E., Hill, S., & Bambra, C. (Eds.). (2016). *Health inequalities. Critical perspectives*. Oxford: Oxford University Press.
- Turnhout, E., van Bommel, S., & Aarts, M. N. C. (2010). How participation creates citizens: Participatory governance as performative practice. *Ecology and Society, 15*(4), 26.
- Van Oers, H. (2015). Op zoek naar nieuwe wegen in de beoordeling van leefstijlinterventies [Towards new approaches to evaluate life style interventions]. *Tijdschrift Voor Gezondheidswetenschappen, 93*(6), 199.
- Van Reybrouck, D. (2016). *Against elections. The case for democracy*. London: Vintage Publ.
- Warren, M. E. (2014). Accountability and democracy. In M. Bovens, R. E. Gooding, & T. Schillemans (Eds.), *The Oxford handbook of public accountability* (pp. 39–55). Oxford: Oxford University Press.
- Weingart, P. (1999). Scientific expertise and political accountability: Paradoxes of science in politics. *Science and Public Policy, 26*(3), 151–161.
- Wolters, A., Wert, G., Schayck, O. V., & Horstman, K. (2018). Invisible work, actors, and knowledge: An analysis of a clinical trial for a vaccine to stop smoking. *BioSocieties*. doi:10.1057/s41292-018-0136-x