Local government officials' views on intersectoral collaboration within their organization – A qualitative exploration

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Abstract

Objectives: Intersectoral collaboration (ISC) is defined as collaboration between health and non-health local government officials and is a prerequisite for the development of integrated policies that address wicked public health problems. In practice, ISC has proven to be problematic, which might be related to differing views on ISC across various policy sectors. Therefore, our objective was to explore local officials' views on ISC.

Methods: We interviewed 19 officials responsible for 10 different policy sectors within two small-sized municipal governments within one Dutch region. We asked interviewees about ISC facilitators and barriers and categorized them in the theory-based concepts of capability, opportunity and motivation.

Results: Capability was found to be determined by the ability to share policy goals, and was more likely to increase when officials had greater motivation to continue learning. Interviewees in both municipalities expected that flatter organizational structures and coaching of officials by managers could improve ISC opportunities. When the perceived feasibility of ISC and professional autonomy was low, motivation to learn new ISC skills was low.

Conclusion: In the view of government officials, ISC is an appropriate tool to address wicked public health problems, but implementing ISC requires flatter organizational structures, merging of departmental cultures and leadership by heads of departments and town clerks

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in order to decrease officials' fears of losing professional autonomy. Public Health Service officials can play a more active role in merging cultures by increasing understanding about the multi-dimensionality of public health and reframing health goals in the terminology of the non-health sector.

Introduction

An important prerequisite for the development of integrated public health policies is intersectoral collaboration (ISC). Within the context of governmental policy, this refers to collaboration between the 'relevant' officials from health and non-health government sectors to prevent very complex (i.e., wicked) public health problems such as childhood obesity [1]. 'Relevant' refers to the goal of ISC, which is to approach the determinants of health in an 'integrated' way. Since health determinants operate in both *soft* domains (i.e., welfare-oriented, like health education, safety, and sustainability), and *hard* domains (i.e., technically, physically and financially oriented, like street lighting, speed limits in residential areas and sidewalks), health ideally should be a mandatory focus *across* domains and structured into the policies of non-health sectors as well. This implies the need for ISC [3-7]. In the policy literature, very complex (public health) problems which have proven to be resistant to resolution are often described by the term 'wicked'. Wicked is not referring to the evilness of a problem, but is referring to the multi-causal nature and social complexity (i.e., involving a wide range of actors) of the problem. 'Wicked' problems are contrasted to 'tame' problems, which might be technically complex, but are less socially complex. Therefore tame problems can be more tightly defined and solved by linear analytical approaches compared to wicked problems which require more innovative and collaborative (intersectoral) problem solving approaches [1,2].

In Dutch municipalities, operational level public officials generally are divided over 8–10 different policy sectors each with their own set of policies (e.g., town planning policies, sport policies). In the public health (PH) sector, officials are assisted by Public Health Services (PHS's) which are formally an extension of the municipal PH department [8]. The work of operational level officials is guided by the policy decisions that are (ultimately) made at the strategic level by the municipal council members. The municipal executive body (called College of Mayor and Aldermen) is responsible for implementing decisions and the town clerk is, as director of the bureaucratic work force, responsible for the translation of political decisions into organizational outcomes. At the tactical level, heads of department(s) manage the work process of the operational level officials. Sometimes, the public is also involved in the policy process; 'bottom-up' approaches refer to policy developments that are more community-driven, while 'top-down' approaches are based on more bureaucratically-driven policy developments [9,10]. Since community needs are rarely restricted to one policy sector; ISC again becomes relevant.

Although quite an extensive range of the literature has explored determinants of ISC [e.g., [5,11-20], fewer studies

[e.g., [6,21-25] have documented how ISC is *perceived* (qualitatively) by officials from different policy sectors (i.e., expertise fields) within local government. Because this type of ISC is critical for making local integrated public health policies [4], the present study aims to answer the following research question: *What are the views of public officials on the determinants of intersectoral collaboration (ISC) within local governments during the preparation phase of implementing ISC within their organization*?

The COM-B system

To understand the determinants of ISC, we apply the 'COM-B' system; capability, opportunity, and motivation (COM) and behavior (B). The COM-B is part of the Behavior Change Wheel (BCW) [26], which is based on a synthesis of frameworks across a range of areas (e.g., environmental and cultural change, social marketing). Since the transition from *intra*sectoral to *inter*sectoral collaboration requires the adaptation of working routines and organizational behaviors, and the COM-B system recognizes that behavior change does not occur in a vacuum, but will occur only when COM determinants for ISC are sufficiently present (Figure 1), using the COM-B seemed an appropriate framework for this study [24,26].

Capability refers to what individuals know or are able to do. For example, the ability of officials to assess the impact of their own work on PH, their beliefs about their capability to persuade stakeholders to invest in health policies, or the charisma of actors to direct the consensus-building process towards a direction that suits their interests [24,26-29].

Opportunity encapsulates structural variables, including all aspects of the physical and social environment that influence behavior either directly or through motivation (e.g., through incentive structures, consultation structures, hierarchical or flat organizational structures). Organizational variables can be operationalized as types of opportunity and can represent a system of interacting elements in
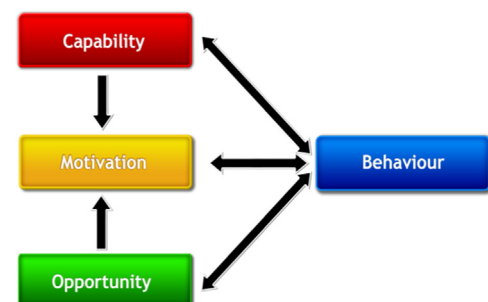

Figure 1   The COM-B system [26].

their own right. Examples are departmental cultures and accompanying traditions and worldviews in each sector that may predict changes in policies or the current limitations officials face during policy developments as a result of previous actions or decisions (i.e., path dependency). Structured relationships related to legitimacy or hierarchical power affect if operational level officials can translate their intentions in behavior or if they can be coerced to comply even if they do not want to perform a certain behavior. Also broader social forces like capitalism or globalization may indirectly shape the policy process. Further, timing, policy free space and fiscal resources are important physical opportunity factors, because decision-making moments are often structured, national devolved obligations need to be met and budgets limit how flexible officials can be in choosing their actions [24,26-29].

Motivation can involve automatic processes or more reflective conscious decision making. Automatic motivation can involve work routines like wanting to involve certain colleagues because of personal connection and trust [16]. Reflective motivation can involve choices that are made based on evaluations of past policies, or carefully prepared efforts to push certain policy ideas into formal policies by officials awaiting for a 'window of opportunity' [24,26-30].

The components of COM-B can be construed at any level (e.g., individual, group). For example, in an organization one may wish to characterize an aggregate measure of motivation to engage in a particular organizational behavior in terms of the mean level or the proportion who report a given level of motivation (similarly, with capability) at a certain stage in the development of integrated public health policies [17,26-29].

Methods

Study sample

ISC can take many forms, including public-private partnerships, public-non-governmental partnerships or public-public partnerships (e.g., between two governments) [5]. In this study, we refer to ISC as an *organizational behavior* between operational level officials from different fields of expertise within the *same* organization (i.e., local government) and *same* organizational level (i.e., horizontal collaboration [6]) during policy development; i.e., agenda-setting, policy formulation, decision making, implementation, evaluation and termination of the policy. An example is the collaboration between the local governmental public health (PH) official and the spatial planning official during policy formulation for an activity friendly neighborhood [7]. To understand the views of local officials on ISC, we looked for municipal governments ('cases') that were interested in implementing ISC. We purposely selected two municipal governments that were in an early phase of ISC [17], both located in the same Dutch region, similar in terms of size and the number of employees, and both aiming at an organizational restructuring in which officials from 'hard' and 'soft' domains would work within one overarching department. The municipalities differed with regard to the actors who had conceived the idea to strengthen ISC. In case 1, this was the municipal council, and in case 2 this

was the PH official. At the moment of the interviews, both municipalities were preparing the implementation of ISC. Because of the difference in actors who conceived ISC, we expected to get a slightly broader view on ISC determinants [31].

During the data collection period (between the summer of 2011 and the spring of 2013), case 1 had 100 employees and case 2 had 65 employees (both municipalities are 'small' by Dutch standards). Both municipalities have around 14,000 inhabitants and cover areas of about 25 km^2.

In each case, we aimed to select one representative from each policy sector (as defined in that specific municipality) in order to obtain a broad view on potential barriers or facilitators for ISC. In both cases, we were able to select one or two representatives from each policy sector, which resulted in the selection of 10 (case 1) and 9 (case 2) officials at the operational level responsible for a total of 10 different policy sectors (some officials were responsible for more than one sector).

Data collection

Our data collection and analysis focused on documenting each case (i.e., each of the two municipal governments we studied) by observing meetings of PH officials with Public Health Service (PHS) officials and by conducting semi-structured interviews using a topic list (Appendix A). Observations were used to assist reflection and contextualize the interviews. In both cases, data was collected during a premature stage of ISC [17].

Data analysis

We used MaxQDA software [32] to analyze the transcripts to identify themes that recurred frequently in the interviews and were expressed with much emphasis. Firstly, we coded all facilitators and barriers and after that, we categorized them in COM [26]. This analysis was discussed with the involved PH and PHS officials in each case. After this discussion, we presented our findings to the interviewees. In case 1, we presented our findings in a presentation, and in case 2, we sent a report with a summary of the outcomes of each interviewee's own interview to the interviewees. Discussions and feedback from the involved PH and PHS officials, and interviewees was used to facilitate our interpretation and contextualize our data. In each case, the data were interpreted by three persons; in both cases, the first author was responsible for the analysis of the raw data; this preliminary analysis was interpreted together with the involved PH and PHS official. Only after they reached full consensus, we presented our findings to the interviewees. In both cases, the interviewees did not have comments on the (results of the) analysis.

Position of the researcher

The researcher positioned herself as an observer and interviewer employed by a public health department within the university. The researcher was present in both municipalities from approximately three months prior to, until approximately three months after the interviews, as part of

a broader study in which she was observing the formulation of new local health policies. In this context, the researcher had close working relationships with the municipal PH official and the PHS officials. Although most non-health officials had seen the researcher prior to the interview, contacts with non-health policy makers were not present until the interviews.

Results

In the next paragraphs we describe our findings of each case separately using direct quotations from the operational level officials. We describe our findings as factors in their preferred end state, implying that a factor currently functions as a barrier (−) when it is *not yet* in place, a facilitator (+) when it is *already* in place or as an uncertain factor (+/−) when it is in place to some extent or if it sometimes functions as a barrier and sometimes as a facilitator. At the end of our results, Table 1 summarizes those COM-factors.

Table 1 Summarized results structured in COM factors.	
Case 1	**Case 2**
Capability factors	**Capability factors**
+/− Understanding multi-dimensional nature of policy issues	+/− Understanding multi-dimensional nature of policy issues.
− Ability to overcome high degree of specialization	
+/− Communication skills	+/− Communication skills
− The ability to create a shared vision and shared policy goals	− The ability to create a shared vision and shared policy goals
− Process-oriented working skills	
− Learn how to weigh interests of citizens and the public	
+/− Creativity and flexibility	+/− Creativity and flexibility
− Stimulation in learning new capabilities	− Stimulation in learning new capabilities
− Heads of departments stimulate capability developments	− PHS officials stimulate the understanding of PH policy issues
Opportunity factors	**Opportunity factors**
− Hierarchical organizational structure	− Hierarchical organizational structure
+ Planned merging of sectors within one department	+ Planned merging of sectors within one department
− Feasibility of the proposed self-governance changes	
− Policy free space: National standards and legislation	− Policy free space: National standards and legislation
	− High workload

Table 1 (*continued*)	
Case 1	**Case 2**
− Workload high and unevenly divided	
+/− Small municipal size	+/− Small municipal size
− Reducing culture clashes hard and soft domains	− Overcoming cultural differences hard and soft domains
− Interventions to bring the domains closer together	− Heads of departments restricting *intra*sectoral policy making
− Heads of departments leading the implementation of ISC	− Involvement of department managers in implementing ISC
− Sufficient municipal budget	− Sufficient municipal budget
− Informal contacts between hard and soft domain officials	− Having to pay the PHS for PH advice
Motivational factors	**Motivational factors**
+ Beliefs about the ISC advantages for citizens	+ Beliefs about the ISC advantages for citizens
− Belief citizens' disinterest in PH	− Beliefs about public preference for less 'healthy' options
− Perceived goal of ISC – political rather than organizational	+/− Genuine interest in PH among hard domain officials
− Perceived consequences of ISC – increase in workload	− Awareness of the health implications of the work in each sector
− Persistence to change work routines	+ Intention to implement ISC and change work routines
− Feelings of professional autonomy	

Note: a factor currently functions as a barrier (−) when it is not yet in place, a facilitator (+) when it is already in place or as an uncertain factor (+/−) when it is in place to some extent or if it sometimes functions as a barrier and sometimes as a facilitator.

Case 1

ISC context and actors
In case 1, ISC was seen as a prerequisite for proper implementation of self-governance. Self-governance was described as follows:

'We invite the residents to say for themselves what they want for their village. And, to put it simply, we may facilitate this [in an intersectoral approach] or not, as the case may be. If it concerns things they can implement for themselves [then the municipal government won't facilitate them].' (Official from PH)
'I think that's the strength of integrated collaboration, that you engage the citizens in the early stages of change. And you ensure that they can provide any information as to what is happening in their own

neighborhood. … It doesn't necessarily have to do with health; it could be in any domain.' (Official from Public Works)

Municipal officials; reported that council members (i.e., local politicians) had heard about the idea of self-governance in other municipalities and were initiating plans to copy this strategy in their own municipality. Therefore council members attended workshops and took the lead in proposing organizational restructuring. ISC was supposed to be part of the new organizational structure in which officials from 'soft' and 'hard' domains would work within one overarching department with one departmental manager. Officials considered this an ideal structure for ISC. Within the new department some officials would need to function as 'neighborhood representatives' who would channel the feedback from neighborhood councils into the municipal organization; they would be responsible for connecting neighborhoods' issues to the appropriate officials from different policy sectors. In this way, citizens would get a more formal role and power in the policy making process and would ISC become necessary. Most officials described this interest in self-governance as a 'trend' within local governments. Only one official framed it as a 'hype':

'To me it's a bit of a fashionable thing. We have to do this, we have to collaborate more, and so on.' (Official from Civil Engineering)

The management level was involved in this process indirectly, not as an initiator, but as the party responsible for the organizational aspects of the change. The municipal PH official (operational level) was responsible for the PH part of the self-governance approach and was supported by PHS officials. The responsible PH official reported to have encountered a lot of resistance from fellow officials in implementing the changes, and had seen the development of a negative attitude towards the municipal manager and the town clerk.

ISC definition
Most officials defined ISC as

'It means you start to look across departments' (Official from Public Works)

Only some officials from the 'hard' domains defined ISC as collaboration *within* rather than *between* sectors:

'We are already doing our best at our department. We actively seek coordination with other colleagues. As a department [before the re-organization], I wouldn't hesitate to say we're doing pretty well in that respect.' (Official from Engineering)

Perceived ISC capabilities
Officials viewed ISC as new and therefore implementing ISC was often described as a learning process:

'You shouldn't be under the illusion that [if] you start to work fully in accordance with this principle, then everything will be fine. … You'll never have 100% success, but you should try to learn, to learn from your mistakes.' (Official from Civil Engineering)

Several capabilities that were considered important for ISC were understanding that most emergent policy issues were multi-dimensional in nature and the ability to overcome the high degree of specialization, since increasing this understanding was sometimes seen as more difficult if officials were very much specialized:

'What you often see is that everyone has their own, err, their own specialty. That they still relatively rarely see beyond the boundaries of their own department. That often happens only at the very last moment. After a lot of things have already been prepared and specified, and then they might ask for a bit of advice from another department. So then I think, oh dear, why didn't you involve us sooner.' (Official from Transport)

Another important skill that would need to be improved according to interviewed officials was communication. Communicating effectively was considered important in order to plan a shared strategy, find a common ground to build intersectoral interventions on, create a shared vision, and establish shared policy goals. Furthermore, process-oriented working skills were considered important since the new way of policy making (i.e., self-governance or bottom-up), required officials to separate the interests of individuals compared to that of the neighborhood. More specifically, officials would need to learn how to ensure they were not progressing individuals but the community. It was especially officials from the 'hard' domains who mentioned that this was often a 'dilemma'. Officials from the 'soft' domains said that the officials in the 'hard' domains lacked creativity and flexibility to overcome such problems, and sometimes this was also recognized by officials from the 'hard' domains:

'The older officials [in the 'hard' domains] tend to stick to their old ways' (Official from Public Works)

Heads of departments were regarded as being in a position to stimulate the development of these ISC capabilities.

Perceived ISC opportunities
Many opportunity-related factors were found to hamper ISC. The most prominent obstacle in the opportunity category was the hierarchical organizational structure. However, most officials expected that several currently separate policy sectors (i.e., expertise fields) would soon be merged, which would increase the ISC opportunities. In relation to this anticipated new organizational structure, some officials raised concerns regarding the perceived lack of feasibility of the proposed self-governance changes. Feasibility was primarily reduced by the perceived lack of clarity about available resources. Especially officials from the 'hard' domains appeared to report this; they expressed that their managers were not obtaining feedback from the officials' day-to-day reality and thus were not able to solve this perceived barrier. Officials from hard domains explained that their concerns were related to their relatively high amount of obligations in term of national standards and legislations. According to them this was decreasing their policy free space (i.e., the number of rules imposed on a policy sector by higher level governments) and thus also their possibility to spend resources on citizens' initiatives

that would emerge from self-governance (i.e., no freely allocatable budget). What made this barrier even more salient was that various officials felt that the workload was unevenly divided; in their eyes, they were working harder than others, and this was being ignored by the management. Since some officials thus already felt limited in their space to act upon community choices, asking citizens to raise 'new' issues in an already saturated agenda seemed unrealistic and put even more pressure on them:

> 'I think it's not so much that they don't want to do it, but it's more the organization around them that's not ready for it. ... So you're attending a meeting of the village council, and you're thinking, well yes, I've also got this problem with that playground, and in fact I have a solution in mind, but well, playgrounds is not my department. That's my colleague's brief, so then you'd have to go and phone that colleague. But that colleague happens to be busy with another project. So that's where it actually goes wrong.' (Official from Public Works)

To reduce the workload officials from the 'hard' domain frequently said they needed a 'buffer' between 'idealistic' political ambitions and their own work; when they were constantly distracted by serving (short term) politics, they would never have time to invest in (long term) ISC. Hard domain officials frequently sought ways to express their concerns and as a reaction, other officials developed a negative attitude towards some of these 'hard' domain officials. According to officials from the 'soft' domains, 'hard' domains always seemed to be making derogatory comments and resist change and this reduced relatedness between colleagues and reinforced existing differences in departmental culture. Since unresolved frictions highlighted the pervasiveness of differences in culture between the various domains this often led to 'culture clashes' that functioned as a barrier to approaching officials from other domains (i.e., and thus hampered ISC). Moreover, perceived cultural differences, led to some officials' belief that the only way to implement ISC changes, was by coercion; they suggested that officials who used their 'pocket veto' to impede change would need to be coerced by the head of their department. Nevertheless, officials were generally against coercion, since it would diminish intrinsic motivation. Respondents in both cases preferred interventions that involved persuasion (i.e., communication to stimulate action) and expressed the need to implement interventions to bring the domains closer together. However, most officials were skeptical about their manager's interest or capability to actually invest in such interventions.

Another opportunity-related factor for ISC was the small municipal size. Officials reported that the small size could either be a barrier for ISC when memories were not so positive or when resources in terms of employees were limited, or a positive contributing ISC factor, because most officials knew each other and could find each other easily:

> 'The town hall isn't that big. ... so in principle each specialist subject has its own policy official, so you know who to contact.' (Official responsible for cultural affairs and sports, for some aspects of youth policy and sometimes for events and subsidies)

Especially when big events were anticipated all sectors would need to be mobilized and 'normal' obligations to be dropped or neglected (thus limiting the resources that could be used for ISC, but increasing contact). Besides, most officials expressed that in practice, informal contacts like chats at the coffee machine, were most often prompted between officials within one domain because they worked physically closer to each other (in the same building or at the same level):

> 'Contacts with the social services department, they're located in the other building, so you don't meet each other that often. When you see them walking around, it's like Oh right, that's also one of ours.' (Official from Public Works)

Also the small municipal size affects the municipal budget; in The Netherlands, municipal funding from the national government is distributed according to number of inhabitants and also municipal taxes are raised per inhabitant, thus limiting available resources to implement ISC.

Perceived ISC motivation

All officials were motivated by the idea that citizens want 'integrated' rather than fragmented solutions, and therefore considered ISC necessary. However, officials also noted that citizens were not always interested in PH. This imposed a barrier for ISC, because the self-governance approach required officials to let their work be guided by citizen initiatives. If citizens would not take public health initiatives (which was expected by some officials if they would not put extra effort in motivating citizens to become interested in PH), officials would thus not be motivated to develop or invest in ISC for PH purposes:

> 'But there are lots of neighborhoods that seem to say health is an issue for the municipal government to deal with, that's not up to us.' (Official from PH)

Another motivational barrier was related to the fact that the decision to implement self-governance was made by politicians and some officials perceived the proposed changes as serving political rather than organizational goals. Organizational goals were perceived as being served by allowing professionals to make their own decisions rather than letting citizens decide. As a consequence, the hard domains department's motivation to implement the changes was low:

> 'We do notice some resistance [towards the organizational change] within our department [public works].' (Official from Public Works)

Additionally, the hard domain officials expected it would increase workload of some officials even more, because besides their normal obligations they would now also need time to handle possible dilemma's that might emerge from stimulating citizens to express their needs. Although the issue of uneven workload was recognized by most officials, some officials framed this argument as a way of defensive reasoning. According to some, 'excuses' popped up soon as their colleagues would need to learn new skills or change their work habits:

'A public works official, who is only interested in infra-structure, I want to work on roads, the design of roads, and not be bothered with all the fuss being made.' (Official from Public Works)

One Public Works official framed the defensive attitude of his colleagues as a lack of motivation in shifting power to citizens because officials would like to stay in charge and retain their professional autonomy:

'You notice that everyone prefers to run their own little shop [i.e. achieve their own policy goals].' (Official from Public Works)

Case 2

ISC context and actors
In case 2, the official responsible for PH conceived the idea to strengthen ISC together with a PHS official. Their rationale was that PH could be addressed most effectively if an integrated PH policy was developed. The need to strengthen ISC flowed naturally from this rationale. Prior to conceiving the idea to strengthen ISC, the municipal organization was preparing to merge policy sectors from 'soft' and 'hard' domains within one larger department as part of an organizational restructuring. The PH official perceived that the idea to strengthen ISC for PH fitted well within the anticipated organizational changes. To start the ISC process, the PH official together with the researcher decided it would be helpful if they would explore their colleagues' views on ISC in general and for PH specifically. Therefore, they started interviewing all non-health sectors. In the PH official's words, his goal was to determine:

'To what extent PH is involved when you [i.e. the non-health sectors] develop new plans.' (Official from PH)

After data collection, another PHS official, with expertise on developing integrated PH policies, heard about the case and proposed that the municipal managers and aldermen would also need to be involved to support the ISC initiatives. Municipal PH officials, the PHS expert, the PH alderman and the PH manager were therefore invited for a meeting that was chaired by the PHS expert. After this meeting, several intersectoral initiatives to improve PH were implemented.

ISC definition
Most officials defined ISC as follows:

'How do you link PH with other policy areas, and conversely, how do you link a policy area with PH, so you get a two-way interaction?' (Official from Public Works)

This 'linking' of health and non-health sectors was considered a learning process, since most officials were not accustomed with making such links. Officials added that ISC was seen as a way to enable the public to play a bigger role in policy making:

'We listen to people's wishes. If signals come from the public, we try to respond to them [in an intersectoral way].... Citizens have a large say in their residential environment. You see the same in other municipalities.' (Official from Spatial Planning)

Perceived ISC capabilities
Interviewees expressed that one of the most important ISC capabilities was being able to see the multi-dimensional nature of policy issues. PHS officials were perceived as being in a position to stimulate the understanding of PH policy issues:

'There's not a great deal of knowledge about health among the local authorities. It's certainly not a bad idea to involve the PHS. The Service could be involved from the very early stages of development.' (Official from Environmental Department)

Another important capability for ISC was being able to communicate effectively since this would enable policy sectors to create a shared vision and establish shared policy goals. Officials from the 'soft' domains added that officials in the 'hard' domains sometimes lacked creativity and flexibility that were, according to them, required for ISC because barriers would often arise naturally during ISC efforts.

Perceived ISC opportunities
Many opportunity-related factors were mentioned to hamper ISC; especially by the officials from the hard domains. 'Hard' domain officials primarily mentioned the presence of national standards and legislation and the related policy free space (i.e., the amount of rules imposed on a policy sector by higher level governments) as limiting their opportunity for ISC. Officials from soft domains more often mentioned the differences in departmental cultures which was often attributed to the world views or 'nature' of officials who chose to work within the 'hard' domains, compared to those working in the 'soft' domains:

'They have a different view on certain things. They're people with a different background, a different education. It's hard sector against soft sector. With them it's all about money, bricks and mortar. It's just a different perspective.' (Official from PH)
'To put in slightly exaggerated terms, they might say "You people are always just chattering about all kinds of things", while we might say "You never think about people".' (Official responsible for youth services)
'It's a huge, or at least major difference of culture, in their approach, their perspective.'(Official from PH)

Both hard and soft domains reported that the small municipal size and close geographical proximity to colleagues was facilitative for ISC because people knew each other and thus could easily find each other. Officials perceived that small municipal size could however also hamper ISC when people had less positive personal histories or when officials were responsible for too many tasks and thus were lacking time to invest in ISC. Another opportunity-related barrier that was reported by both hard and soft domains was the current organizational structure; most officials expected that merging of the departments would increase the ISC opportunities although this would be quite time consuming:

'Well, yes, that means quite a drastic change to the organization. That's been started now, but it's not something that can be implemented overnight [as it requires large investments].' (Official from PH)

Another factor limiting opportunity for ISC was the lack of involvement of department managers in ISC. Heads of departments were seen as being in a position to stimulate ISC by restricting the opportunities for *intra*sectoral policy making:

'That would be my advice, that they [heads of departments] should at least ensure that [they check whether policy proposals are integrated].' (Municipal official responsible for youth services, social services, and tourism)

Additionally, one Public Environment official mentioned that having to pay for PH advice by the PHS represented an opportunity-related barrier to involving the PHS during policy developments, especially in times of budget cuts.

Perceived ISC motivation

Even though officials perceived they would most likely not be incentivized for ISC because of the fragmented policy goals and related performance measures, all officials reported to be motivated to implement ISC because they thought that citizens' needs could most effectively be addressed adopting ISC; in their eyes, ISC was essential to deliver good governance services. A downside of the grounding of ISC motivation in the needs of citizens was that some officials perceived that citizens were not always expressing they want 'healthy' options. They perceived that especially commercial or other for-profit organizations (e.g., caterers of sport clubs) and even semi-public organizations (e.g., schools) were therefore more interested in providing unhealthy options; they were more interested in raising revenues than progressing PH. Another factor related to divergent interests, is that officials from the soft domain, sometimes doubted the genuine interest in PH of officials who chose to work within the 'hard' domains. Although this disinterest in PH was not expressed during the interviews with the hard domain officials; instead, they seemed unaware of the health implications of their work, and seemed surprised to discover that health was a much broader concept than they thought it was. 'Hard' domain officials expressed they perceived health as being the absence of illness rather than a concept grounded in environmental determinants for which they were responsible.

Discussion

In this study we discussed two municipal governments, which aimed to strengthen ISC as an organizational behavior between policy officials with divergent expertise (e.g., health and environment) to address emergent wicked policy problems. The aim of our study was to understand the views of those officials regarding ISC. In each case, we described the ISC context and actors, the definitions given to ISC, and we explored which barriers and facilitators officials from health and non-health policy sectors perceived during their preparation of ISC. To aid interpretation we categorized

barriers and facilitators within the theory-based concepts of capability, opportunity and motivation. In the upcoming sections we will discuss the similarities and differences between our cases and recommendations for policy-makers and practitioners will be provided.

Comparing the cases: main differences and similarities

The main difference between the cases was the motivation to change. This seemed to be explained by the different *contexts* in which ISC was initiated and the *actors* that were involved in preparing the organizational change [33].

In case 1, the interest in ISC was related to a fundamental shift from top-down policy-making (bureaucratically-driven) towards a bottom-up style (community-driven). This would require a shift of both political and bureaucratic power, due to the more formal role citizens would get in the policy-making process. Therefore officials in case 1 would need to let go some of their expert opinions, and take on the challenge of giving away some of their influence (while they know they are the experts) by letting input from citizens guide policy developments. Although officials in case 2 would also need to let go some of their expert opinions and let input from their colleagues guide some policy developments, they would still be in charge of policy developments. In other words, the anticipated changes in case 2 did not require confrontation with established power structures, while in case 1 confrontation with established power would be required. A review of determinants of intersectoral alliances [5] also found that such changes in the status quo make it more difficult to obtain broad commitment for ISC and this is thus likely to explain the lower motivation for ISC in case 1.

The other case difference was related to the *actors* who initiated the change towards more ISC; in case 1, local politicians had conceived the idea for change, while in case 2, the idea for change was conceived by one of the operational officials themselves. Politicians were perceived by the operational level as 'imposing' the change on officials, without taking care of feasibility aspects of the change. In case 1, this led to concerns about losing professional autonomy. Especially officials from the hard domain felt that others, primarily heads of departments and local politicians, were ignorant of their concerns and frequently complained about this. Soft domain officials interpreted these complaints as defensive reasoning and this interpretation seemed to arise from a history of negative personal contacts and low levels trust. The combination of the involuntary top-down character of the change and the poor interpersonal relations between several actors in case 1 seemed to have reduced the motivation for ISC in a substantial way [5,12,16,33].

Besides those case differences, cases were similar with regard to the reactive instead of pro-active approach towards the organizational restructuring, the lack of involvement of managers in the restructuring, and the ISC skills and policy free space of officials working in the soft versus hard domain. In both cases, officials from 'soft' and 'hard' domains would soon be working within one overarching department. Although this new organizational structure at

first glance seems ideal for ISC, the restructuring was (at least partly) based on a need to achieve greater efficiency related to budget cuts in municipalities which followed from the Dutch national government's strict budgetary discipline and the economic crisis. To achieve efficiency, often reduction in management and operational level officials is intended, implying that there may have been a mismatch between goals like job security and higher level goals like organizational efficiency [5]. This also explains why, in both cases, managers were not much involved in facilitating the change and why none of the respondents mentioned the role of the town clerk explicitly, although the town clerk is formally in a position to direct the organization. So some structural barriers may have been relieved, but not motivated by a drive towards ISC.

Another similarity was found in ISC capabilities of officials in the 'soft' and 'hard' domain; soft domain officials seemed already familiar with some of the ISC skills which those of the hard domains perceived as new. The importance of such ISC skills was also found in previous case studies [6,11,12]. Soft domains' officials ISC skills seemed more developed because of their reliance on building alliances with citizens or other organizations to achieve policy goals with (relatively) scarce resources. To build such alliances, soft domain officials are required to adopt an intersectoral perspective [12]. Such capabilities are more generic and might explain some of the differences in worldviews of soft and hard domain officials. In contrast, working in hard domains often requires a higher degree of specialization and while resources are relatively larger in absolute terms (compared to those of the health sector) they cannot be spent as one whishes. This is an important opportunity-related factor that seems to be (unintentionally) underestimated by those in the soft domain. Even though PH officials are also working within a legislative framework, the PH framework is much less regulated, implying that soft and hard domain officials work in different cultures and operate from a completely different back ground of which they not always seem aware.

Recommendations

Our findings illustrate the potential of ISC as an organizational behavior to approach wicked problems. To fulfill this potential we recommend that organizational structures become less fragmented because, as Hunter [34] argues, it is unlikely that collaborative structures overlaid on fragmented working arrangements which have endured for decades will suddenly work: 'they are superimposed on a fragmented and largely tribalistic set of arrangements characterized by different cultures and ways of conducting the business' [34]. To assist working in new collaborative structures we recommend that heads of departments and the town clerks support officials in decreasing some of the fears of losing professional autonomy related to some ISC changes and look behind their defensive reasoning. They could for example implement training on how to handle dilemmas in which interests of citizens seem ambiguous and be more transparent about budgets. Additionally, to reduce the culture clashes, it would be important for those in leadership positions to create awareness between officials

with different backgrounds. Awareness raising initiatives could involve letting officials from soft and hard domains present each others' work or rotate soft and hard domain officials in each others' work environment. With regard to PH policies, we recommend that PHS officials pro-actively approach non-health officials with advice about how their policies affect health and how they can make their policies more health promoting. PHS officials are seen as a trustable source for health information and thus are in a good position to increase non-health official's understanding of the social determinants of health. Besides, PHS officials themselves need to improve their skills to reframe the health problem so other policy domains understand their influence on health; e.g., by expressing the problem of obesity in economic terms [e.g., [35,36].

Strengths and limitations

A strength of this study is the 'thick descriptions' of two cases that illustrate a unique exploration of ISC in a practical setting [31]. Our cases highlight the importance of policy-making for policy and are intrinsically interesting because they provide opportunities to learn from these two cases. Especially because our cases had different ways of approaching the implementation of ISC, heterogeneity in our data, a variation in our sample and the context in which the interviewees worked was realized. Another strength is that we were able to contextualize our data by observing meetings of the PH and PHS officials and were able to reflect together with PHS officials and PH policy makers. Our prolonged engagement with the PH and PHS officials in each case also seemed to increase their openness during the interviews and enabled us to raise sensitive topics, which improved our ability to obtain rich data. A downside of such transparency and prolonged involvement was that our research findings might have been skewed towards more favorable health attitudes. Since all interviewees knew the researcher was situated within a university health department and collaborated with the municipal PH and PHS official(s), officials might have felt the social bias to show interest in health or at least showed more interest in health than they otherwise would (affecting motivation). Reflections with PH officials after the interviews confirmed this possibility. Furthermore, the involvement of a colleague (the PH official) in interviewing might have affected the willingness to provide sensitive information (e.g., about others within the organization).

A methodological limitation is that we only included two cases with some specific characteristics such as their small size and geographical position. Some recent reviews, however, show that our study is part of a much wider literature [e.g., [5,13]. Further, the small size of our cases might increase the importance of the role of the heads of departments, the fact that officials know each other personally, the type and magnitude of problems that are encountered (typically urban problems versus small-town or village issues), the amount of resources available for PH (lack of resources may act as an incentive to collaboration, while lack of time acts as a barrier), and the different influence of citizens on the policy process (e.g., citizens of

small municipalities might have much closer contact with local politicians).

Another limitation that affected the representativeness of our data was the premature nature of ISC which was limiting our ability to get empirical data that describes 'actual' determinants of ISC; due to the limited experience with ISC our findings describe *perceived* or *predicted* rather than *experienced* ISC determinants in the first stages of ISC [17]. Finally, we acknowledge that we could have examined a broader range of organizational behaviors relevant to the ISC, such as agenda-setting and strategic level leadership or determinants like the official's personality, the organizational history of each case and the specific effect of municipal size. We recognize that a more in-depth exploration of the other concepts might yield additional insights to those provided in our study. At present, it seems difficult to collect such data without being intrusive; it would become too broad and complex for interviewees to address the whole spectrum.

Conclusion

ISC is perceived as an appropriate tool to address wicked public health problems. However, implementing ISC requires more collaborative organizational structures that set the structural parameters for ISC in a favorable way. To assist working in collaborative structures, we recommend that heads of departments and town clerks support officials in decreasing fears of losing professional autonomy (which seem related to some ISC changes), look behind the defensive reasoning of some officials, and merge departmental cultures. Therefore heads of departments and town clerks should show leadership and coach their officials. Also PHS officials can play a more prominent role in facilitating the merging of health with non-health sectors, through proactively increasing understanding about the multidimensional nature of PH and reframe health goals in the terminology of the non-health sector.

Conflict of interest

We have no conflict of interest. This study received ethical approval (METC azM/UM 12-5-060).

Appendix A.   Topic list for the interview protocol

1. Clarifying the role and influence of the policy sectors; their general policies and more specific policies – policy goals.
2. Identifying interfaces between a particular policy sector and the public health sectors.
3. Exploring to what degree a particular policy actor is aware of health aspects of the work within their sector and of the extent to which they are used to collaboration with the regional Public Health Service or the public health department within their own organization.
4. Investigating what the particular policy sector thinks about intersectoral collaboration with the health sector.
5. Exploring opportunities for more collaboration between health and non-health policy sectors.
6. Detecting barriers preventing attention for public health aspects in non-health policy sectors

References

[1] Australian Government. Tackling Wicked Problems A Public Policy Perspective. ⟨http://www.apsc.gov.au/publications-and-media/archive/publications-archive/tackling-wicked-problems⟩; 2007 [accessed 04.07.13].

[2] Rittel HWJ, Webber MM. Dilemmas in a general theory of planning. Policy Sci 1973;4(2):155-69.

[3] Kickbusch I, McCann W, Sherbon T. Adelaide revisited: from healthy public policy to health in all policies. Health Promot Int 2008;23(1):1-4.

[4] Hendriks A-M, Habraken J, Jansen MWJ, Gubbels JS, De Vries NK, Van Oers H, et al. 'Are we there yet?' – operationalizing the concept of integrated public health policies Health Policy 2014;114(2):174-82.

[5] Tubbing L, Tjemkes B, Vos P, Keijsers J, Paulussen T. Intersectorale Allianties: Een Literatuurstudie en Onderzoeksraamwerk. ⟨http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCgQFjAA&url=http%3A%2F%2Fpublications.tno.nl%2Fpublication%2F100274%2Fm1PKnf%2Ftubbing-2012-intersectorale.pdf&ei=aLAKU5v5A4vQiAeu9oHYAQ&usg=AFQjCNGkEKUZytFWQUVk4faBTqSt1mSscw&bvm=bv.61725948,d.aGc⟩; 2012 [accessed 14.03.14].

[6] Steenbakkers M. Lokaal integraal gezondheidsbeleid: realistische uitdaging of utopie? Een onderzoek binnen gemeenten naar mogelijkheden tot intersectorale samenwerking. [Local integrated health policy: realistic challenge or utopian dream? A study of opportunities for intersectoral collaboration in local government.] (Ph.D. thesis). Zuid Limburg: Maastricht University, Academic Collaborative Centre of Public Health; 2012.

[7] Aarts MJ, Jeurissen MPJ, van Oers HAM, Schuit AJ, van de Goor LAM. Multi-sector policy action to create activity-friendly environments for children: a multiple-case study. Health Policy 2011;101(1):11-9.

[8] Vereniging van Nederlandse Gemeenten (VNG): Toekomstvisie op publieke gezondheid Maatschappelijke vraagstukken centraal – verbinden verschillende beleidsdomeinen. [Policy outlook on public health: focus on social issues – linking policy domains]. ⟨http://www.vng.nl/files/vng/vng/Documenten/Extranet/Sez/OGZ/Toekomstvisie%20publieke%20gezondheid.pdf⟩; 2009 [accessed 04.07.13].

[9] Eversole R. Remaking participation: challenges for community development practice. Community Dev J 2012;47(1):29-41.

[10] Eversole R. Community agency and community engagement: re-theorising participation in governance. J Public Policy 2011;31(1):51-71.

[11] Public Health Agency of Canada. Crossing sectors – experiences in intersectoral action, public policy and health. ⟨http://www.phac-aspc.gc.ca/publicat/2007/cro-sec/index-eng.php⟩; 2007 [accessed 24.02.14].

[12] World Health Organization. Health equity through intersectoral action: an analysis of 18 countries case study. ⟨http://www.who.int/social_determinants/resources/health_equity_isa_2008_en.pdf⟩; 2008 [accessed 04.07.13].

[13] Nilsen P, Ståhl C, Roback K, Cairney P. Never the twain shall meet? – a comparison of implementation science and policy implementation research Implement Sci 2013;8(1):63-75.

[14] Thow AM, Swinburn B, Colagiuri S, Diligolevu M, Quested C, Vivili P, et al. Trade and food policy: case studies from three Pacific Island countries. Food Policy 2010;35(2010):556-64.

[15] Thow AM, Quested C, Juventin L, Kun R, Khan AN, Swinburn B. Taxing soft drinks in the Pacific: implementation lessons for improving health. Health Promot Int 2011;26(1):1-10.

[16] Himmelman AT. Collaboration for a change, ⟨http://depts.washington.edu/ccph/pdf_files/4achange.pdf⟩; 2002 [accessed 04.07.13].

[17] Storm I, Harting J, Stronks K, Schuit AJ. Measuring stages of health in all policies on a local level: the applicability of a maturity model. Health Policy 2014;114(2-3):183-91.

[18] Storm I, Verweij A, Van der Lucht F. Integraal gezondheidsbeleid op lokaal niveau. Wat weten we en hoe nu verder? [Local integrated health policy. what do we know and how to proceed?] Bilthoven: Rijksinstituut voor Volksgezondheid en Milieu (RIVM); 2012. ⟨http://www.rivm.nl/bibliotheek/rapporten/270161004.pdf⟩. [accessed 04.07.13].

[19] Storm I., Savelkoul M, Busch MCM, Maas J, Schuit AJ. Intersectoral collaboration in tackling health inequalities: a study of sixteen municipalities in the Netherlands, ⟨http://www.rivm.nl/bibliotheek/rapporten/270161002.pdf⟩; 2010 [accessed 04.07.13].

[20] Storm I, Aarts M-J, Harting J, Schuit AJ. Opportunities to reduce health inequalities by 'Health in All Policies' in the Netherlands: an explorative study on the national level. Health Policy 2011;103:130-40.

[21] Allender S, Gleeson E, Crammond B, Sacks G, Lawrence M, Peeters A, et al. Policy change to create supportive environments for physical activity and healthy eating: which options are the most realistic for local government? Health Promot Int 2011;27(2):1-14.

[22] Allender S, Gleeson E, Crammond B, Sacks G, Lawrence M, Peeters A, et al. Moving beyond 'rates, roads and rubbish': how do local governments make choices about healthy public policy to prevent obesity? Austr NZ Health Policy 2009;6(20):1-8.

[23] Steenbakkers M, Jansen MWJ, Maarse H, de Vries NK. Sturing op integraal gezondheidsbeleid: de rol van gemeentelijke afdelingshoofden. [Aiming for integrated health policies: the role of heads of municipal departments] TSG. Tijdschr Gezondheidswetenschappen 2011;89(5):266-73.

[24] Hendriks AM, Kremers SPJ, Gubbels JS, Raat H, De Vries NK, Jansen MWJ. Towards health in all policies for childhood obesity prevention. J Obes 2013;2013:1-30.

[25] Hendriks A-M, Kremers SPJ, Jansen MWJ, Seidell JC, de Vries NK, Gubbels JS. Interventions to promote an integrated approach to public health problems – an application to childhood obesity. J Environ Public health 2012;2012:1-14.

[26] Michie S, Van Stralen MM, West R. The behaviour change wheel: a new method for characterising and designing behaviour change interventions. Implement Sci 2011;6:1-12.

[27] Hendriks A-M, Jansen MWJ, Gubbels JS, De Vries NK, Paulussen T, Kremers SPJ. Proposing a theoretical framework for integrated health policy making with an application to childhood obesity – the Behavior Change Ball. Implement Sci 2013;8:46-62.

[28] Cane J, O'Connor D, Michie S. Validation of the theoretical domains framework for use in behaviour change and implementation research. Implement Sci 2012;7:1-17.

[29] Choi T, Robertson PJ. Caucuses in collaborative governance: the effects of structure, power, and problem complexity. ⟨http://www.maxwell.syr.edu/uploadedFiles/conferences/pmrc/Files/Choi_Caucuses%20in%20collaborative%20governance%20The%20effects%20of%20structure%20power%20and%20problem%20complexity.pdf⟩; 2011 [accessed 14.03.14].

[30] Kingdon JW. Agendas, alternatives and public policies. New York: Addison-Wesley Educational Publishers Inc.; 2003.

[31] Yin RK. Case study research, design and methods.3rd ed. Newbury Park: Sage Publications; 2002.

[32] MAXQDA – Qualitative Data Analysis Software ⟨http://www.maxqda.com/⟩ [accessed 14.03.14].

[33] Ryan N, Williams T, Charles M, Waterhouse J. Top-down organizational change in an Australian Government agency. Int J Public Sect Manag 2008;21(1):26-44.

[34] Hunter DJ. Leading for health and wellbeing: the need for a new paradigm. J Public Health 2009;31(2):202-4.

[35] Freijer K, Tan SS, Koopmanschap MA, Meijers JMM, Halfens RJG, Nuijten MJC. The economic costs of disease related malnutrition. Clin Nutr 2013;32:136-41.

[36] Dorfman L, Wallack L. Moving nutrition upstream. the case for reframing obesity. J Nutr Educ Behav 2007;39(2):45-50.