

Piece of cake?

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“Good, better, best. Never let it rest. Until your good is better and your better is best.”

(Tim Duncan, American basketball player, five-time NBA champion)

Preface and acknowledgements

At the age of eight I started playing basketball. For me this was, and still is, a way to stay in contact with my friends, remain in shape and dismiss cares from my mind. Unfortunately, the pleasure of being healthy is not given to everyone. During one of my training sessions I observed a little boy who was clearly overweight. Although the other kids did not seem to bother, I saw that he had difficulties keeping up with the team. He ran behind, could not dribble between his legs (as basketball players do) and incidentally bumped into his teammates. The story reminds me why obesity research and the efforts from all relevant stakeholders are so important.

I would like to look back on the process of writing this master thesis by using some basketball terminology. Before starting my thesis project, and in terms of the ‘warming-up’, I had the pleasure to be part of a three year bachelor program at the Utrecht School of Governance. Moreover, I enjoyed one and a half year of academic training within the joint master *Research in Public Administration and Organizational Science* from Utrecht University, VU University Amsterdam, Erasmus University Rotterdam, Tilburg University, Radboud University Nijmegen and Twente University.

Throughout the ‘match’, I experienced the ups and downs of a research project: reading interesting papers and having great conversations with various interviewees, while at the same time struggling to find research focus and working hard to deliver my thesis on time. Luckily, I could rely on two great ‘coaches’: Gjalt de Graaf and Frank de Bakker (VU University Amsterdam). I thank Gjalt for his committed and constructive way of supervising, Q-methodology inspiration and the freedom you gave to explore and develop my own thesis project. I also thank Frank for his thorough revisions on previous versions of this thesis and concrete suggestions to improve my work. Although the closed department entrance at the VU building would suggest differently, I felt that I could easily reach both of you whenever I needed.

Furthermore, I very much appreciate the cooperation of all 24 participants, outside the safe ‘stadium environment’. Your enthusiasm, sincere help, hospitality and knowledge have not only been a crucial source of data, but also an important source of personal energy. It was wonderful to hear your stories, collect so many different views on obesity and discover consensus, knowing that your roles and interests are not the same.

I recognize the positive role of the ‘technical board’, headed by research master coordinators Albert Meijer and Paul 't Hart. Their drive to create a community of students and guide the overall progress of the master program, surely contributed to my learning experience. I acknowledge the help from my ‘teammates’, fellow students: Rosanna Nagtegaal, Maurits van Leeuwen, Julia Penning de Vries, Dominique Smeets (for their feedback on the articles) and James Thorogood (for reviewing this final piece on the use of English language). Fortunately there were also ‘cheering fans’ (friends and family) that supported me throughout the thesis project.

In this volume, I will present the ‘final score’ of my thesis. The first (and main) article *Piece of cake?* is concerned with obesity as an intractable policy controversy and discusses the fames of different policy actors and an alternative obesity frame to reach consensus. As I wondered why I had not heard of Q-methodology before doing my thesis, I started thinking of doing a systematic review on Q-methodology in public administration research. This resulted in a second (methodological) paper *Using Q-methodology in Public Administration*, in which I analyze the potential of Q-methodology for public administration scholarship.

Even though I incredibly enjoy being a student, I feel it is time for me to make a ‘transfer’. I am looking forward to next season, applying my research knowledge and skills in society and hopefully staying in close contact with academia.

Utrecht, July 11, 2016

Sem Enzerink

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A Q-study on public, private and non-governmental obesity frames

Sem Enzerink¹

Abstract

Obesity has become an intractable policy controversy: a problem with a multiplicity of frames and highly contested causes, responsible actors and solutions. As a result, collaboration between different stakeholders is hampered. This study offers the obesity frames of 24 public, private and non-governmental policy actors from the Netherlands. The empirical findings, based on Q-methodology, reveal three obesity frames: 'joint regulators', 'freedom fighters' and 'united self-regulators'. An alternative 'health facilitators' frame is proposed to reach consensus among the three frames. By clarifying the role of health facilitators, the study contributes to a more constructive obesity debate and shows the value of Q-methodology for analyzing health related policy controversies.

Keywords

Obesity, intractable policy controversy, frames, Q-methodology, The Netherlands

Introduction: recasting obesity controversy

Obesity has become one of the key issues in health policy nowadays and many attempts are made to reduce obesity prevalence (Dietz & Gortmaker, 2016; Kersh, 2015; Vallgård, 2015). Obesity scholars have concluded that collaboration between public, private and non-governmental organizations is needed to address the multifactorial nature of obesity

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and reverse the negative consequences on individual wellbeing and rising public health costs (Doak et al., 2006, p. 129; Roberto et al., 2015, p. 2401).

However, consensus is missing and collaboration is hampered, because obesity is a so called *intractable policy controversy*. The nature of the policy problem is heavily contested (Hisschemöller & Hoppe, 1996; Rein & Schön, 1996). Obesity is an intractable policy controversy, as a multiplicity of obesity frames exists. Each frame underlines different causes, responsible actors and solutions (Lawrence, 2004, p. 58; Rich & Evans, 2005, p. 345). Collaboration is hardly established, as long as the obesity frames of policy actors are structurally separated (Mercer, 2010, pp. 5-7; Roberto et al., 2015, p. 2401).

In this article, the intractable policy controversy of obesity is analyzed through the frames of policy actors from public organizations, the food industry and health related NGO's, a perspective that is largely missing in the current obesity debate (Jenkin et al., 2011, p. 1023). The controversy over obesity has been widely studied through media analyses (Kim & Willis, 2007; Lawrence, 2004; Sun et al., 2016) and through the frames of obesity patients and other lay persons (Lundell et al., 2013; Oliver & Lee, 2005; Thomas et al., 2014). Both approaches demonstrated large emphasis on the individual causes and responsibilities for obesity.

The frames of policy actors conceal important knowledge on how to reach consensus and stimulate collaboration. Public, private and non-governmental organizations are among the most influential actors in obesity developments, as they can provide information and regulations, renew food products and set the obesity agenda respectively (Kwan, 2008, pp. 29-30). Studies that did focus on the frames of public, private and non-governmental policy actors (Greener et al., 2010; Herrick, 2008; Kwan, 2008; Saguy & Riley, 2005) usefully mapped different obesity frames, but refrained from bridging opposing perspectives as a way to make obesity less controversial and more tractable.

Hence, the aim of this study is to recast the intractable policy controversy of obesity into a less controversial and more tractable debate. The main research question is: *How do public, private and non-governmental policy actors frame obesity?* By analyzing the frames of 24 policy actors from public organizations, the food industry and NGO's, it is possible to discover alternative obesity frames. In this way the policy

controversy can be redefined, consensus can be detected and collaboration between different policy actors can be stimulated (Van Eeten, 2001, p. 395).

To examine the research question, the concept of intractable policy controversy is theoretically envisioned first, followed by five ideal type of obesity frames. Thereafter, Q-methodology is specified as a suitable approach for analyzing intractable policy controversies. The main empirical findings are presented along the lines of three obesity frames and an underlying consensus frame. In the final section it is concluded and discussed how the results of this study contribute to a more constructive obesity debate.

Theory: intractable policy controversies and obesity frames

Rein and Schön (1996, p. 85) introduced the concept of intractable policy controversy to describe heavily debated policy problems (controversies) that become hard to solve or pin down in the first place (intractable). Here, intractable policy controversies are understood to occur “when different (coalitions of) stakeholders in a policy arena approach an issue with sharply different definitions of the situation and propose seemingly irreconcilable courses of action” (’t Hart & Kleiboer, 1996, p. 8). Typical intractable policy controversies, such as immigration and environmental issues, are characterized by highly contested problem definitions and dispute over what should be done (Dekker, 2016, p. 2; Scholten & Van Nispen, 2008, p. 183).

The analysis of this study focuses on obesity *frames*, since intractable policy controversies are essentially about a multiplicity of frames (Rein & Schön, 1996, p. 88; ’t Hart & Kleiboer, 1996, p. 8). Frames can be defined as “heuristic devices which shape our understanding and evaluation of the world around us” (Koon, Hawkins & Mayhew, 2016, p. 3). According to Entman (1993, p. 52) frames have four functions, they: define problems, diagnose causes, judge actors, and suggest solutions. In the context of obesity, different frames exist, capturing different causes, responsible actors and solutions (Greener et al., 2010, p. 1048; Kim & Willis, 2007, p. 359). Importantly, frames generally vary depending on who defines the problem (Iyengar, 1996, p. 61; Rochefort & Cobb, 1993, pp. 59-60). By analyzing the obesity frames of different policy actors a consensus frame can be found that stimulates collaboration (Gray, 2004, pp. 167-168; Rein & Schön, 1996, p. 88; Shmueli et al., 2006, pp. 216-217).

Obesity frames that create controversy

The current obesity controversy manifests itself in two academic debates with five competing obesity frames: libertarianism, paternalism, libertarian paternalism, collectivism and relativism (see table 1 for an overview). Based on Wikler (2002, p. 47), a first debate centers on the question who is responsible for causing and solving obesity. In this debate, libertarianism opposes paternalism, libertarian paternalism and collectivism (Brownell et al., 2010, p. 382; Lawrence, 2004, p. 59; Verweij & Dawson, 2013, pp. 4-6). Within a second discussion, the prior four 'epidemic' obesity frames are confronted with relativism, which tries to prevent the negative social consequences of obesity, rather than solve the obesity 'problem' (Vallgård, 2015, pp. 317-318). The five obesity frames that shape the intractable policy controversy are clarified below.

Libertarianism "pertains to the view that individual rights are paramount" (Roberts & Reich, 2002, p. 1056). In the libertarian realm, individual choices (unhealthy diets and a lack of exercise) cause obesity and therefore obese are responsible for solving obesity themselves (Cappelen & Norheim, 2005, p. 467). Libertarians oppose government interventions, as they find regulations from the 'nanny state' impeding (Baggott, 2010, p. 9; Hayry, 2013, p. 94). If there are any obesity policies from a libertarian perspective at all, these policies are non-coercive. Self-regulation and information provision for instance enable consumers to make free, but better informed choices (Buyx, 2008, p. 871; Holland, 2015, p. 50).

In contrast to the libertarian focus on individual freedom, *paternalism* stands for "intrusion of the state upon individual liberty in order to promote health and safety" (Beauchamp & Steinbock, 1999, p. 23). Paternalists argue that obesity is caused by factors that go beyond individual control, such as unsupportive physical and social environments and socioeconomic circumstances (Kersh, 2015, p. 1084; Swinburn & Egger, 2004, p. 736). Therefore, paternalists find government responsibility morally justified (Buchanan, 2008, pp. 15-16). This obesity frame results in coercive policy instruments that eliminate consumer choices. For example: banning products, restricting particular ingredients and limiting marketing activities for unhealthy products (Holland, 2015, pp. 148-151; Turollo, 2009, p. 1201).

An increasingly influential obesity frame is *libertarian paternalism*, broadly defined as "new techniques of government-sponsored behaviour change" (Jones et al.,

2010, p. 483). Following its founders Thaler and Sunstein (2003, p. 177), libertarian paternalism is libertarian because choices are retained, while paternalistic, since governments tempt citizens to choose in welfare-promoting directions. Libertarian paternalism is a controversial frame on its own, as it denotes specific causes, responsible actors and solutions. Libertarian paternalists grasp obesity causes in terms of cognitive biases, including status quo preferences and risk aversion (Ménard, 2010, pp. 232-233; Thaler & Sunstein, 2003, p. 176). They believe that governments are responsible for restoring unhealthy biases with nudges, while consumers are responsible for making healthy choices accordingly (Holland, 2015, pp. 64-65). Libertarian paternalists support policy solutions such as new product labeling, food taxations and alternative spatial designs (Brownell et al., 2010, pp. 384-386; Jones et al., 2010, pp. 486-488).

Collectivists “place great emphasis on the beneficial role of the state and other collective arrangements” (Baggott, 2010, p. 10). They define obesity as a multi-actor and multifactor problem, highlighting the systemic interplay of different actors and factors (Finegood, 2011, pp. 212-220). In comparison with the former frames, collectivism assumes that a broader range of stakeholders is responsible for addressing obesity, including governments, businesses, NGO’s, employers, schools, insurers, healthcare professionals and patients (Fahlquist, 2005, p. 15; Wikler, 2002, p. 47). Collectivist policy solutions need to be integrative, as in the case of local community agreements and public-private partnerships (Bryden et al., 2013, p. 195; Galea & McKee, 2014, p. 140).

All previous obesity frames view obesity as a problem or ‘epidemic’ that should be solved (Vallgård, 2015, p. 317). *Relativism* opposes the former frames by emphasizing that obesity is a sign of natural diversity (Saguy & Riley, 2005, pp. 914-915). Relativists “think that there really is no right answer to moral questions because morality is relative to culture or society” (Sheehan, 2007, p. 93). They believe that the causes of obesity are irrelevant, since causes are scientifically uncertain and relate to the wrong problem (Rich & Evans, 2005, pp. 342-343). The real problem concerns the negative social consequences of obesity: stigmatization and social exclusion (Cooper, 2010, p. 1020). Relativists allocate responsibilities to governments and NGO’s, to promote more equal treatment of obese (Puhl & Heuer, 2010, p. 1025). Instead of policy interventions to solve obesity, relativists support awareness campaigns for fat acceptance and health-at-every-size (Kwan, 2008, p. 33).

Table 1. Ideal type obesity frames

	Libertarianism	Paternalism	Libertarian paternalism	Collectivism	Relativism
Causes	Individual choices	Environment	Individual biases	Multifactorial	Irrelevant
Responsible actors	Individuals	Government	Government and individuals	Multiple stakeholders	Government and NGO's
Solutions	Individual and self-regulation	State regulations	Nudging	Partnerships	Awareness campaigns

Research method and data

To investigate the intractable policy controversy through the obesity frames of public, private and non-governmental policy actors and uncover consensus, Q-methodology was used. Q-methodology is a small-sample, mixed-method approach that assists “the orderly examination of human subjectivity” (Brown, 1980, p. 5). That means, it is a particularly robust way for systematically exploring opinions, value orientations and perspectives on a topic (Cross, 2004, p. 1; Van Exel & De Graaf, 2005, p. 1; Watts & Stenner, 2012, p. 68). Therefore, Q-methodology has been applied in other health related studies, such as health conceptualizations of children (Van Exel et al., 2006), chronic pain perceptions (Risdon et al., 2003) and views on health care resource allocation (Van Exel et al., 2015). In Q-studies participants are asked to rank a sample of statements that reflect different points of view within a debate. Factor analysis allows to find clusters of respondents that reflect a certain point of view. Q-methodology can also identify consensus by displaying statements that are ranked similarly by all respondents. This makes Q-methodology particularly helpful for studying intractable policy controversies (Van Eeten, 2001, p. 392). As discussed below, Q-methodology involves: designing a set of statements (Q-set), selecting participants (P-set), ranking statements (Q-sort), and processing and analyzing the data.

Designing the set of statements (Q-set)

Rigor Q-studies have a broadly representative sample of statements, the Q-set (Watts & Stenner, 2012, p. 58). The five theoretical obesity frames (libertarianism, paternalism, libertarian paternalism, collectivism and relativism) and policy documents from relevant public, private and non-governmental organizations were used to craft a complete set of statements. A matrix (comparable to table 1) helped to balance the Q-set and ensured that the specific causes, responsible actors and solutions from each of the five theoretical obesity frame were included. An initial list of 42 statements was reviewed by five experts: an experienced obesity researcher, a public health ethicist, two scholars in government, business and NGO collaboration, and a Q-methodology expert. This review confirmed the variety of statements, but completed the Q-set with additional statements concerning: the relation between obesity and socioeconomic background, the societal emphasis on health, community programs, obesity related health insurances, the role of medical specialists and medical obesity solutions (bariatric surgery). By adding statements all relevant aspects regarding the intractable policy controversy of obesity could be discussed with participants. The final 48 statements were printed on randomly numbered cards (appendix, table 1).

Selecting participants (P-set)

A total of 24 Dutch policy actors participated in the research: 8 public policy actors (from different layers of Dutch government and various public knowledge institutes), 8 private policy actors (from food producers and business representative bodies) and 8 non-governmental policy actors (from obesity and health associations, as well as health activist groups). Policy actors from the Netherlands were studied, because controversy characterizes the Dutch obesity policy landscape: faith in personal freedom, contrasted by a belief in policies that may impede personal freedom (The Netherlands Scientific Council for Government Policy, 2014, p. 109). For the purpose of exploring consensus (instead of increasing generalizability) maximum variation sampling was chosen. Maximum variation sampling expands subject variety, so that consensus counts for a highly diverse group (Patton, 2015, p. 283). Apart from organizational and sectoral differences, respondent variation was obtained in terms of gender (11 men and 13 women) and their level of experience (4 juniors, 14 mediors and 6 seniors/directors).

Ranking statements (Q-sort)

Respondents were asked to create a Q-sort: a ranking of the 48 statements. They first divided the statements into three broad categories (agree, not sure and disagree). Participants then used a quasi-normal distribution to finalize their Q-sort (see figure 1), ranging from most disagree (-3), to most agree (+3). Respondents that wanted to rank either more or less statements in a column than indicated were allowed to do so. After sorting out the statements, respondents were asked whether they missed any causes, responsible actors or solutions in relation to obesity. Participants generally agreed that the Q-set was complete and balanced. Suggestions were specifications of existing statements, such as a comment on the role of culture that is closely related to social environment and societal norms (statement 27 and 46). To support the interpretation of the ranked statements, subsequent qualitative interviews were conducted. Respondents explained their statement ranking, especially the statements they most agreed and disagreed upon (in figure 1: statements 18, 36, as well as 16 and 35).

Figure 1. Q-sort distribution (statement ranking from factor I)

most disagree ←————→ most agree						
-3	-2	-1	0	+1	+2	+3
18	2	3	1	6	4	16
36	9	17	5	8	7	35
	15	19	10	11	34	
	29	21	12	13	41	
	39	26	14	20	48	
		27	24	22		
		31	25	23		
		32	28	33		
		45	30	42		
		46	37	47		
			38			
			40			
			43			
			44			

Processing and analyzing the data

The collected Q-sorts were processed and analyzed using PQMethod (version 2.35), a software program for analyzing Q-data. The analysis started with a correlation matrix that correlated all available Q-sorts in pairs. Centroid factor analysis was then applied to extract persons with highly correlating Q-sorts. Factors represent shared frames among two or more participants. Participants with a significant loading on a factor (0.39, $p < 0.01$ in the case of 48 statements) were flagged for a varimax rotation in order to maximize the loading on each factor. The final analysis selected three factors on the basis of explained variance, and the number of respondents that: loaded on one factor, confounded on more factors or did not load on any factor. Two of the three factors exceeded a factor eigenvalue of 1.00. A third factor (eigenvalue: 0.79) was included, by looking at the factor loading of two specific respondents. The significant persons loading on this factor indicated that two participants represented a distinctive frame and therefore offered a theoretically relevant and informative perspective (Watts & Stenner, 2012, pp. 105-110). After retaining this three factor solution, idealized Q-sorts were computed for each of the three factors. An idealized Q-sort represents how a hypothetical policy actor with a 100% loading on the factor would have ordered the 48 statements (see figure 1 for the idealized Q-sort of factor 1). While interpreting the factors, special attention was paid to items that participants most agreed or disagreed with, as well as items that significantly distinguished them from the other two factors. To identify consensus among the three frames, all statements were ranked on the basis of consistency (appendix, table 1). The statements on which respondents scored very similarly were used to construct a consensus frame. The interview data (transcribed verbatim) helped interpreting the Q-sorts and the consensus frame.

Findings

The final analysis extracted three factors: frames of policy actors that capture the causes, responsible actors and solutions with respect to obesity (see appendix, table 1). These factors together account for 52% of the variance in the ranked Q-sorts. Correlation between the first frame and the two other frames turns out relatively low (0.22 and 0.21). The second and third frame correlate considerably (0.59), hinting that these frames are somehow overlapping. The three empirical frames will be presented as narratives,

supported by respondent “quotes”, as is common in Q-studies (Risdon et al., 2003; Van Exel et al., 2006; Van Exel et al., 2015). The figures in parentheses correspond to statement numbers, followed by the ranked position in the idealized factor (e.g. #16, +3). Each frame description puts forward different obesity causes, responsible actors and solutions. The metaphor of cutting a cake is used to illustrate how different policy actors divide responsibilities, based on obesity causes and solutions.

Frame I: joint regulators

All 16 policy actors from public organizations and NGO’s are connected to a *joint regulators* frame: policy actors that understand obesity through environmental causes, pertain to the vision that multiple actors should take responsibility and opt for government regulations. Metaphorically, joint regulators try to cut the cake of responsibility in fairly equal pieces among different stakeholders, by using a relatively sharp-edged knife.

Joint regulators assume that environmental factors cause obesity. They for instance strongly agree that the availability of unhealthy food triggers obesity (#35, +3) and heavily disagree with the position that marketing does not play a role in obesity development (#18, -3): *“He enters home, starts watching television and is flooded by commercials for tasty snacks, just thinks about grabbing another cookie, cannot take the stairs at work, because they are all the way in the back of the building, so lazily takes the elevator. Those kind of aspects are all factors that are beyond individuals. It is completely the environment around someone.”* (R9). In this frame causes are understood on a macro level and not as part of individual behavior.

Joint regulators believe in a shared responsibility among different stakeholders. They want broadly supported solutions, as they emphasize collaboration and shared responsibility for solving obesity (#16, +3): *“There is not one magic bullet, one policy measure, one type of intervention to solve this problem. Therefore you have to do it from all angles.”* (R13). Moreover: *“This obesity problem is multi-causal, so there are of course many things that can play a role and in case of all these factors different actors are involved. So to change that, you need all these actors.”* (R5). Joint regulators thus believe in joint actions to solve obesity.

This frame entails relatively ‘sharp’ policy solutions. That means that joint regulators are not afraid to use coercive state regulations or strictly monitored nudges. Joint regulators differ from other obesity frames with high scores on statements regarding legal obligations for food producers to make their products healthier (#34, +2) and marketing restrictions for unhealthy products (#48, +2): *“Enforce this legally, [...] it is also because of unfair competition, [...] and that is thus a reason why I do believe in a role for the government. And everything in close consultation with one another.”* (R7).

The interests of public and non-governmental policy actors can explain why they adhere the frame of joint regulators. For public policy actors, clear results are highly important. Public policy actors spend public money and are therefore keen on effective and efficient measures. For them, declining obesity rates are crucial: *“Indeed, you can only spend your money once [...], luckily the prevalence rates are decreasing, we are very happy with that.”* (R5). Non-governmental policy actors favor a joint regulator frame, because they strive for open and truthful information. They support strict regulations (such as legal marketing restrictions), because regulations are not *“telling people what to do, but provide people with good information and balanced information.”* (R14).

Frame II: freedom fighters

Contrary to the focus of joint regulators on shared and relatively coercive solutions, *freedom fighters* (supported by two private policy actors) believe that obesity is an individual problem, with individual causes, responsibilities and solutions. Freedom fighters do not cut the cake of responsibility among different stakeholders. They serve the entire cake to individuals, add a couple notes on the ingredients and leave the responsibility for eating the cake to the individual. This is the cake without the knife.

When it comes to obesity causes, freedom fighters essentially believe that there are many factors causing obesity (#41, +3). Nevertheless, they define obesity particularly as an individual physical or mental problem: *“I think that obesity in fact is a problem, for the health of those people, but also because of what it mentally does to a person. Unhappy. Insecure. Low self-esteem.”* (R21). In line with this, freedom fighters strongly oppose the idea that obesity patients cannot help that they have become obese (#1, -3).

Since freedom fighters articulate individual causes, they also say that individuals are responsible for solving obesity (#43, +2): *“It always starts with you as an individual.”* (R21). Freedom fighters think that neither NGO’s (#24, -2) nor food producers (#11, -2) are responsible for addressing obesity: *“I believe that you are responsible yourself, not society. I think that we should provide information as a producer and that is all we can do.”*(R22).

Freedom fighters consider obesity solutions to be a personal matter: *“The solution lies within yourself and not with us producers by making something leaner or healthier”*(R22). Freedom of choice and free markets are vital for freedom fighters. They resist legal state interventions that regulate product composition and marketing. However, freedom fighters do support local community programs to support healthy behavior and reduce obesity prevalence (#42, +3). A policy actor from the food industry elaborates on a public-private community partnership called JOGG (translated as: Youth At a Healthy Weight): *“It starts with the children, and with the use of JOGG, that particularly focuses on youth, they grow up with this healthier way of living and become adults, and they will have children themselves. You have to start somewhere.”* (R21). Freedom fighters thus accept some policy solutions, as long as the solutions stimulate (instead of regulate) health on a local level.

The frame of freedom fighters can be explained by the interest of the two private policy actors that support this frame. Remarkably, both a representative from a fast-food restaurant chain and from a fruits and vegetables supplier connect to this frame. Regardless of their sectoral background, the idea that the individual is responsible for obesity reflects a broader interest in freedom and market liberation. In the end, the two private policy actors believe that any type of regulation impedes the market and the profitability of their company: *“It would be nice if I would tell you that we are all heading for the same goal, we are going to solve obesity all around the globe, but that is not true [...] people want to make money.”*(R21).

Frame III: united self-regulators

The frame of *united self-regulators* is a more broadly supported variant on the second frame. Six policy actors from the food industry relate to this frame. Like freedom fighters,

united self-regulators strongly believe in obesity as an individual problem with individual causes. Their focus on shared responsibility and shared solutions distinguishes them from freedom fighters (who leave responsibility and solutions at the individual level). Metaphorically, united self-regulators cut a large piece of responsibility for the individual consumer and then realize that a single person cannot digest such a large piece of cake. So they cut the cake again, distributing responsibilities among different stakeholders, using a relatively dull knife.

United self-regulators accept the view that there are many different obesity causes (#41, +3). As is true for joint regulators, they underline different individual causes and put business activities in perspective. Marketing and product labeling do not directly cause obesity (#4, -2): *“You can feel hungry if you are highly exposed to luxuriance of food, let’s be honest. But hey, than you also need to have the food available to start eating. It is not always the case that you indeed start eating.”* (R2). United self-regulators thus understand obesity by its individual causes and not by the influence of other actors, as similar to freedom fighters.

Despite the emphasis on individual causes, united self-regulators strongly believe in shared responsibility. They are convinced that obesity can only be solved if all relevant actors work together (#16, +3): *“Everyone has its role and no one has the ultimate responsibility, so to say.”* (R3). Another business representative elaborates on the collaboration between the food industry and government: *“We are condemned to cooperate. Whenever politics says, we are not going to arrange this, and we direct it to the industry, then you have to make an effort, because in the end it is the government that sets the rules, so you have to operate within that framework. Therefore you are compelled to collaborate.”* (R12). Thus, in contrast to freedom fighters, united self-regulators stand for shared responsibilities instead of an individual responsibility for obesity.

As opposed to the ‘sharp-edged’ solutions of joint regulators, the solutions of united self-regulations are relatively ‘dull’. Instead of legal obligations to make products healthier (#34, -3), united self-regulators prefer cooperation between consumers, governments, businesses and NGO’s (#16, +3). They support the recent *Dutch Agreement to Improve Product Composition*, because it is a relatively flexible initiative that unites self-regulatory efforts, without enforcing healthier products by law: *“I*

absolutely believe in the National Agreement To Improve Product Composition in that sense, do not impose norms, because that will only result in boring uniformity and that is not what we want either." (R3). The same goes for the shared responsibility to inform consumers with public campaigns (#10, +2), so that the obese can change their diet (#8, +2): *"It is always good to have knowledge. Actually every person in our society should know more than he or she knows at the moment."* (R2).

Again, the interests of the policy actors explain why they relate to this frame. Unlike freedom fighters, united self-regulators stand for shared responsibilities, because they see health and cooperation as an opportunity instead of a threat. A healthy approach serves their business interest, as it meets consumer demands and ensures fair competition: *"Of course health is in the interest of business. You have the healthiest supermarket, the topic of health in magazines [...], so for supermarkets it is definitely profitable to promote oneself as healthy [...]. But it is really about creating a leveled playing field, meaning, if you are going to lower the amount of salt in soup, then let's do it together so no one is treated unfairly."* (R12).

Towards consensus: a health facilitator frame

A debate with joint regulators, freedom fighters and united self-regulators is likely to preserve controversy. The three obesity frames advocate different causes, responsible actors and solutions. In particular, joint regulators promote stricter state interventions, whereas freedom fighters deny regulation and united self-regulators suggest more flexible business-led regulations. Nevertheless, consensus can be reached. The statements on which all public, private and non-governmental policy actors have similar views (appendix, table 1) reveal a *health facilitators* frame. A health facilitator frame provides a foundational 'cake tin' for all three frames and opens the door to collaboration.

There is consensus among public, private and non-governmental policy actors that obesity is a considerable problem (#36), caused by are many different factors (#41) that are difficult to understand (#31). Health facilitators therefore acknowledge that obesity is not either an individual or a societal problem, but a problem in both ways: *"On an individual level, the health of the patient, because I am sure that you will experience medical complications, and also that it brings along enormous costs for society."* (R7).

Policy actors from public organizations, the food industry and NGO's also generally agree that obesity involves a shared responsibility (#16), even though freedom fighters agree less (+1) than joint regulators (+3) and united self-regulators (+3). Health facilitators argue that public, private and non-governmental policy actors should not force consumers in a certain direction, but have a responsibility for making healthy choices more convenient: *"The easiest summary is always a little figure that has to roll a ball up a mountain, which represents healthy behavior. So that is something that an individual has to do itself, but the steepness of the slope is determined by the industry, the government, environment and social factors."* (R4). This frame thus recognizes both primary responsibility for individuals and a collective facilitating responsibility for other stakeholders. This fits freedom fighters that want consumer responsibility first, but meets the supportive role of joint regulators and united self-regulators at the same time.

A health facilitator frame is also visible in the policy solutions that public, private and non-governmental actors agree upon. Consensus exists on preventive measures, such as changing portion sizes (#19), subsidizing sports activities (#17) and initiating public campaigns (#10). Public, private and non-governmental policy actors are also united on the idea that obese should not be demanded to undergo medical surgeries to overcome their weight problem (#21) and argue that higher health insurances are no effective policy for solving obesity (#9). Large dispute is over whether subsidies for healthy products (#6) and food taxes for unhealthy products (#3) are needed. Also restrictions on the food assortment (#12) and the boundaries of food composition measures (#34), labeling (#4) and marketing (#48) are controversial.

In sum, health facilitators seek to provide individuals with a helping hand. They do not choose among different causes, responsible actors or solutions, but recognize that different aspects play a part. There are two conditions to promote a health facilitators frame. First, stakeholders have to explore the mutual benefits of promoting health. As one policy actor explains: *"The products that people really want, healthy, tasty and convenient at the same time, those are scarce. This is a gap in the market [...]. So then the interest of governments, business, people in society and knowledge institutions are becoming aligned very soon."* (R18). Second, policy actors believe that they should increase mutual understanding of other policy actors and their interests. If policy actors put themselves in the shoes of other stakeholders, *"everyone can learn from each other and you start thinking towards solutions."* (R24).

Conclusion and discussion

This empirical Q-study uncovered three obesity frames that represent public, private and non-governmental policy actors within the intractable policy controversy of obesity. The findings show that frames depend on who defines the problem (Iyengar, 1996, p. 61; Rochefort & Cobb, 1993, pp. 59-60). Public and non-governmental policy actors with an interest in clear results and fair information are *joint regulators*. They understand obesity by environmental causes, shared responsibility and relatively coercive policy solutions. In contrast, policy actors from the food industry value freedom and profitability. They emphasize individual causes, combined with personal responsibility and solutions (*freedom fighters*), or shared responsibility and self-regulation (*united self-regulators*).

The focus of public policy actors on environmental causes and shared responsibility is consistent with paternalistic and collectivist preferences, as found in prior research (Greener et al., 2010, p. 1047). It may be unexpected that non-governmental policy actors did not display a distinctive relativist obesity frame (Kwan, 2008, p. 32-33). A plausible explanation for this is that the fat acceptance movement is not as influential in the Netherlands as in for instance the United States (Saguy & Riley, 2005, pp 877-878). The frames of private policy actors (*freedom fighter* and *united self-regulator*) confirm a libertarian style with a focus on individual responsibility, but also underline a shift towards collective health responsibilities (Herrick, 2009, pp. 57-59; Kwan, 2008, pp. 32-33).

To resolve the intractable policy controversy of obesity and reach consensus among public, private and non-governmental policy actors, a *health facilitator* frame is proposed. Roberto et al. (2015, p. 2401) argue that false dichotomies (individual versus environmental causes and personal versus collective responsibility) hamper cooperation between policy actors. A health facilitator frame recognizes both primary causes and responsibilities of individuals and the supportive responsibilities of governments, businesses and NGO's. This nuance is often missing in media analyses and public opinion studies (Dorfman et al., 2005, p. 328). As similar to the *behavioral justice* perspective of Adler and Stewart (2009, pp. 61-64), a health facilitator frame recasts the obesity controversy by focusing on accessible health choices for everyone. In line with literature on intractable policy controversies (Gray, 2004, pp. 167-168; Rein & Schön, 1994, p. 176; Shmueli et al., 2006, pp. 216-217), a health facilitator approach can only be put into

practice, whenever policy actors identify mutual benefits and understand the interests of other policy actors.

In this study consensus among different policy actors was explored, using maximum variation sampling (Patton, 2015, p. 283). Although the sample of 24 respondents meets Q-methodological standards for revealing different frames (Watts & Stenner, 2012, p. 73), the findings are modest in terms of external validity. Additional survey research would be valuable in order to judge the prevalence of joint regulators, freedom fighters and united self-regulators in a broader population of policy actors. Notwithstanding, Q-methodology turns out to be useful for recasting intractable policy controversies and finding consensus among a multiplicity of frames (Van Eeten, 2001, p. 395). Next to the obesity controversy, the heated debates on alcohol regulation and tobacco taxes could benefit from Q-methodology (Cohn, 2016; Hawkins et al., 2016; Schmidt, 2016). Q-methodology enables researchers to analyze controversies and find more fruitful ways to debate health policy.

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Appendix

Table 1. Idealized factor scores (with ranks based on consensus)

Statements	Factor			Consensus rank
	I	II	III	
1. Obesity patients cannot help it that they have become obese.	0	-3	-1	(37)
2. There is nothing wrong with being obese.	-2	-2	-2	(4)
3. A food tax for unhealthy products would not solve obesity.	-1	1	2	(41)
4. Product labels are often misleading and should be improved to stop obesity.	2	1	-2	(45)
5. The price of sports activities does play a role in the development of obesity.	0	-1	1	(10)
6. Healthy food should be made more affordable by subsidies.	1	-1	-1	(27)
7. People with a low social economic status are more likely to become obese than people with a high social economic status.	2	-1	2	(38)
8. Obese should change their diet to overcome obesity.	1	0	2	(19)
9. People with obesity should be obliged to pay more health insurance.	-2	-1	-1	(11)
10. Public campaigns should inform consumers to make healthier choices.	0	1	2	(16)
11. The food industry is responsible for addressing obesity.	1	-2	0	(39)
12. The number of unhealthy food products should be limited.	0	-1	-1	(28)
13. Obesity can be addressed by introducing new portion sizes of products.	1	1	0	(6)
14. People become obese as healthy food is too expensive.	0	-1	-1	(13)
15. Addressing obesity is not a shared responsibility.	-2	-1	-2	(20)
16. Obesity can be only be solved if consumers, governments, businesses and non-governmental organizations all work together.	3	1	3	(17)

17. Subsidizing sport activities would be no effective way to decrease obesity numbers.	-1	0	-1	(12)
18. The marketing of unhealthy products does not play a role in the development of obesity.	-3	-1	0	(40)
19. Food is not bad in itself, oversized portions lead to obesity.	-1	2	1	(44)
20. People become obese because they do not know what is healthy for them and what not.	1	2	1	(15)
21. Obese should undergo medical surgery, such as stomach reductions and gastric bypasses.	-1	-1	0	(9)
22. People become obese as unhealthy food is too cheap.	1	-1	-1	(33)
23. Individuals cannot solve and obesity problems on their own.	1	-1	0	(18)
24. Non-governmental organizations (NGO's) are responsible for addressing obesity.	0	-2	0	(26)
25. A lack of physical exercise causes obesity.	0	0	1	(5)
26. Food suppliers should have the freedom to decide whether or not they make their products healthier.	-1	1	2	(43)
27. Our social environment encourages us to exercise more often.	-1	2	1	(42)
28. Obese need to increase physical exercise in order to overcome obesity.	0	-1	1	(30)
29. No one is responsible for addressing obesity.	-2	-1	-1	(29)
30. Obesity should be addressed by medical specialists.	0	-1	0	(8)
31. The causes of obesity are easy to understand.	-1	-2	-1	(1)
32. Obesity is a physical disease.	-1	-1	0	(3)
33. It is likely that you become obese if people around you are obese as well.	1	-1	0	(24)
34. Food suppliers should be legally obliged to make their products healthier.	2	-1	-3	(46)
35. People become obese because there is too much unhealthy food available.	3	-1	-2	(48)
36. Obesity is not a problem.	-3	-3	-3	(2)
37. Individuals become obese because of their genes.	0	-2	0	(25)
38. Obesity is a mental disease.	0	2	1	(35)
39. Obesity is not caused by the unhealthy diet of individuals.	-2	0	0	(31)

40. Responsible actors try to shift responsibility to others.	0	0	-1	(22)
41. Many different factors cause the development of obesity.	2	3	3	(14)
42. Obesity should be addressed by local communities, for instance at schools, at work and by sports associations.	1	3	1	(36)
43. Individual consumers are responsible for addressing obesity.	0	2	1	(32)
44. Obese should be encouraged to exercise more often in order to address their obesity.	0	-1	1	(21)
45. Obesity does not have to be solved, people should do whatever they like.	-1	-2	0	(7)
46. Society overemphasizes being healthy.	-1	0	0	(23)
47. The government is responsible for addressing obesity.	1	-1	0	(34)
48. The marketing of unhealthy products should be restricted by law.	2	-1	-2	(47)

Using Q-methodology in Public Administration

Using Q-methodology in Public Administration

A systematic literature review

Sem Enzerink¹

Abstract

Public administration research serves science as well as the practice of public administrators. In a search for more relevant and rigorous methods, this article presents a systematic literature review on empirical Q-studies in top public administration journals between 1995 and 2015. With 31 published articles during the past two decades, Q-methodology (an approach for the study of subjectivity) has been relatively absent from mainstream public administration. Q-methodology has nevertheless considerable potential, particularly for studying administrative role conceptions, policy stances and stakeholder views. Taking into account its own shortcomings, Q-methodology could complement traditional quantitative and qualitative methodologies. A Q-methodological research agenda for public administration is given.

Keywords

Q-methodology, mixed methods, public administration, systematic literature review

Introduction: searching for rigor and relevance

The scientific study of public administration has to serve two audiences at the same time: scientists and practitioners (Brower, Abolavita and Carr 2000, 346; Dodge, Ospina and Foldy 2005, 288; Pollitt 2016, 4-5). Both audiences are demanding. On one hand public administration scholars need to improve their methodological rigor, as compared to psychology, sociology, economics and political studies (Gill and Meier 2000, 193;

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Groeneveld, Tummers, Bronkhorst, Ashikali and Van Thiel 2015, 62). On the other hand there is a call for more useful practical knowledge and increased relevance (Perry 2012, 479).

This article pinpoints the most important weaknesses of current quantitative and qualitative methods in public administration research and assesses the potential of Q-methodology (a rather unnoticed research approach) in addressing those weaknesses. Initially, Q-methodology was used as a foundation for the systematic study of human subjectivity in psychology (Brown 1980, 5). Nowadays, scholars from a broad range of disciplines have reviewed the potential of Q-methodology, including: nursing research (Akhtar-Danesh, Baumann and Cordingley 2008), health economics (Baker, Thompson and Mannion 2006), social work (Ellingsen, Størksen and Stephens 2010) and human geography (Eden, Donaldson and Walker 2005).

In order to map the potential of Q-methodology for public administration, a systematic literature review on Q-studies in top public administration journals between 1995 and 2015 will be presented. In this way the following question can be answered: What is the potential of Q-methodology for public administration research? This article starts with outlining the most pressing weaknesses of current quantitative and qualitative research in public administration. The main findings cover key developments of Q-methodology in mainstream public administration and discuss benefits and limitations in terms of relevance and rigor. To conclude, the potential of Q-methodology and a Q-methodological research agenda are put forward.

Balancing rigor and relevance in public administration research

Building on Dodge et al. (2005, 288), rigor comes down to the accurate and systematic application of methods conform established research standards, whereas relevance is about offering practitioners with knowledge to make informed choices and implement solutions effectively. Current quantitative and qualitative studies compromise practical relevance and scientific rigor in different ways.

Quantitative research is known for its rigor in terms of external validity (Sale, Lohfield and Brazil 2002, 44-45). Moreover, standardized measures and the comparison of large samples, help quantitative scholars to increase explanatory power (Niglas 2010,

220). Both the external validity and explanatory nature of quantitative work offers policy practitioners with relevant knowledge, as quantitative findings and its prescriptions can be broadly applied (Bryman, 2015, 401-402). However, it is questioned whether quantitative methods accurately grasp the local circumstances that are part of public administration. Quantitative findings may lack “contextual realism” (Wright and Grant 2010, 692). This is problematic for public administration scholars particularly, because they frequently rely on pre-existing datasets, which do not always fit the contextual demands of practitioners (Wright, Minigault and Black 2004, 757).

In turn, qualitative scholars are valued for their sensitive interpretations and contextual understanding (Patton 2015, 22). Qualitative rigor is about authenticity and the richness of the collected data (Bryman 2015, 399; Gabrielian, Yang and Spice 2008, 147). Practitioners benefit from qualitative research, as findings arise from the perspective of the subject and are therefore closely connected to the belief systems of practitioners (McNabb 2008, 273). Nevertheless, qualitative scholars are criticized for missing structure and being insufficiently systematic in their analysis (Ellingsen et al. 2009, 396; Patton 2015, 22). A specific weakness in qualitative public administration studies is the lack of explanatory power (Brower et al. 2000, 387). Practitioners would benefit from knowledge that is not merely descriptive, but also offers new alternatives and clear courses of action.

The history and essence of Q-methodology

Q-methodology was developed in 1935 by William Stephenson as an alternative for Pearson’s R-statistics and correlates individuals rather than survey items (Stephenson, 1935). In essence, Q-methodology is about analyzing subjective components of human behavior, meaning that it systematically identifies points of view on any matter of personal or social importance (McKeown and Thomas 2013, IX). A typical Q-study is put into practice by: developing a set of statements that covers different perspectives in a debate, selecting a sample of participants, participants ranking the set of statements on a quasi-normal distribution and analyzing the individual rankings using factor analysis and qualitative data to interpret the factor analysis (Brown 1980, 259-263). More details on how to apply Q-methodology can be found in the comprehensive guidelines of Q

methodology: A sneak preview (Van Exel and De Graaf 2005) and *Doing Q methodological research* (Watts and Stenner 2012).

As compared to traditional survey research, Q-studies aim for describing a population of viewpoints and not a population of people (Risdon et al. 2003, 377). Q results in what Barrance describes as “the identification of shared frames of reference among two or more participants, an identification of intersubjectivity” (2015, 700-701). By correlating the perspectives of people and applying factor analysis, Q-methodology identifies common viewpoints instead of population characteristics (Watts and Stenner 2012, 68). Another difference between Q-methodology and survey research is that Q-methodology does not require large samples before it can extract robust clusters of viewpoints (Van Exel and De Graaf 2005, 2).

Unlike many qualitative approaches, Q-methodology standardizes data collection and data analysis to reveal common perceptions. Respondents rank a set of statements in a relatively structured manner (using a quasi-normal distribution), which allows for the application of quantitative factor analysis (Durose et al. 2015, 3). Similar to qualitative interviews, Q-methodology tries to understand human subjectivity, but it analytically rests on the systematics of quantitative statistics instead (Stirling, Simmons and Spash 2003, 10).

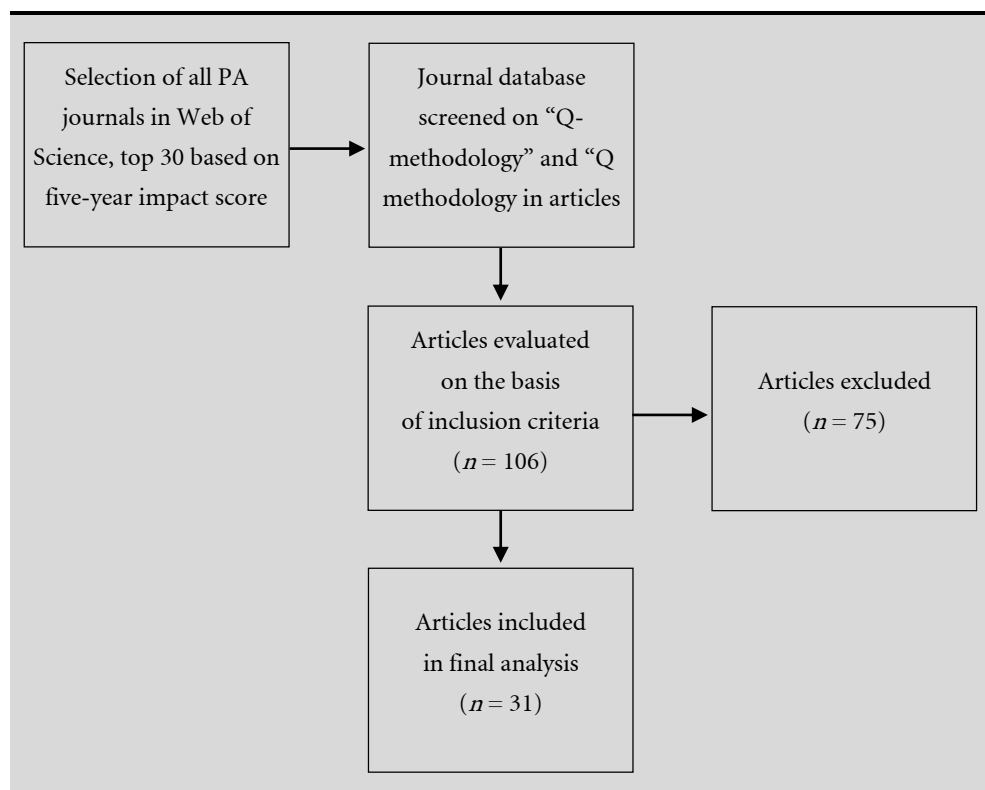
Method and data: a systematic literature review

In order to assess the potential of Q-methodology for public administration research, a narrowly scoped systematic literature review was conducted. The *Preferred Reporting Items for Systematic review and Meta-Analysis* (PRISMA) guidelines were followed (Liberati et al. 2009). A list of all public administration journals was administered first from the ISI Web of Science database. Top 30 journals were chosen, based on five-year impact scores. On the websites of these journals, any article including “Q-methodology” or “Q methodology” in the text was selected ($n = 106$). Thereafter, articles were excluded that: only contained references to other Q-studies, were published before 1995, or were conceptual papers without empirical data stemming from Q-methodology (see table 1 and figure 1). This strategy resulted in a total of 31 empirical public administration studies that used Q-methodology for data collection ($n = 31$).

Table 1. Inclusion criteria

Field	Public administration
Method	The study needs to apply Q-methodology for data collection. That means: using participants (P-set) for ranking a set of statements (Q-set), resulting in a distribution of statements (Q-sort) that has been analyzed using factor analysis (Q-analysis)
Study design	Only empirical studies were included
Type of publication	Only ISI rated international peer-reviewed articles were included
Year of publication	January 1995 until December 2015
Language	English

Figure 1. PRISMA flow diagram



The final body of 31 articles was analyzed in terms of: journal, year of publication, country of data collection, relevance for public administration practice and scientific rigor (table 2). In this way it could be assessed whether Q-methodology is a potentially valuable methodology for public administration research.

Table 2. Assessment criteria

	Assessment questions
General assessment	In which journal was the article published?
	In what year was the article published?
	In which country were the data collected?
Assessing relevance	What kind of practical knowledge was generated?
Assessing rigor	How was the representativeness of the Q-set ensured?
	What was the sample size of the study?

Findings

In total, 31 studies were published between 1995 and 2015 in top public administration journals, meaning an average of one and a half publication each year ($\mu = 1.52$; $\sigma = 1.69$). Notably, more than half of the Q-studies (56%) was published in *Administration & Society*, *Public Administration Review* and *Policy Sciences*. Most journals ($n = 16$) did not contain a Q-study at all (appendix, table 1). Moreover, data collection took place in only 10 distinctive countries (appendix, table 2). Possible explanations for the absence of Q-methodology in mainstream public administration are its specific vocabulary (Q-set, P-set, Q-sort) and the general observation that only 5.9% of public administration research employs mixed-methods (Groeneveld et al. 2015, 72). Nevertheless, Kendall's Tau correlation shows that there has been a significant rise of Q-methodology articles over the past two decades ($\tau = 0.57$, $p < 0.01$). This trend can be related to the specialization of some scholars in Q-methodology. A select group of Q-methodologists started to publish more Q-studies over the years, indicated by the participation of one author (Stephen Jeffares) in 6 of the 31 studies.

Relevance: role conceptions, policy stances and stakeholder controversies

To find out the relevance of Q-methodology for practitioners, the 31 articles were reviewed on the type of knowledge that they produced. It turns out that Q-methodology can play a role in: identifying public administrative role conceptions, uncovering policy stances and resolving stakeholder controversies.

A first series of studies focuses on how policymakers conceive their role and responsibilities in public office (Brewer, Selde and Facer 2000; De Graaf 2011; De Graaf, Huberts and Smulders 2014; O’Conor 2015; Palmer 2013; Selden, Brewer and Brudney 1999). The role conception typology of Zimmerman and Allen (2009) for instance shows that chief administrative officers of local public recreation agencies are either ‘socially proactive administrators’ (actively promoting public interests) or ‘balancers’ (neutrally following political demands). In a similar way, Kennedy (2013, 793) wondered “how bureaucrats see their role as representatives within their organizations”. She discovered ‘leaders’, ‘traditional bureaucrats’, ‘identity empathizers’, and ‘diversity advocates’ within different levels of American government. In both examples, Q-methodology revealed role conceptions and created awareness on the representational consequences that these roles articulate. Zimmerman and Allen (2009, 470) conclude: “As administrative roles are better understood, administrators will be more aware of their behavior and subsequently better equipped to address the demands and expectations of operating a recreation system”. Q-methodology allowed Kennedy in a similar way to reflect on bureaucratic representation and made practitioners aware that their “legitimacy can be sustained through their representative nature” (2013, 807-808). Q-methodology thus functions as a mirror that enables practitioners to reflect on their administrative roles and its representational consequences.

Whereas the previous scholars investigated how public administrators conceive their roles, Q-methodology is also applied to explore how policymakers perceive specific policies or external developments (Callahan, Dubnick and Olshfski 2006; Donahue 2004; Jeffares and Skelcher 2011; Klijn et al. 2014; Martin and Steelman 2004; Skelcher 2010). Knowledge on policy stances and perceptions of external developments are particularly relevant in the light of policy implementation. Barrance (2015) illustrates this point in a British study on the stances of local government actors towards the digitalization of government services. The four resulting frames (‘Sunlight on Government’, ‘Cautious

Crowdsourcers’, ‘Gov1.0’ and ‘Platform Providers’) are relevant to policymakers, because future policies can take into account different positions on the scope of digital reforms and the role of citizens therein (Barrance 2015, 707). In the case of aquaculture regulation in Colorado, Siddiki, Basurto and Weib (2012, 167) questioned: “What is the relationship between the design of regulations and levels of individual compliance?”. With the use of Q-methodology the perceived appropriateness of regulations was linked to different regulation components. Again, Q-methodology findings informed policymakers on how to design policies in line with the policy stances of different public administrators.

Furthermore, Q-methodology is used to identify different stakeholder views in policy controversies, such as sustainable development (Cuppen 2012; Pelletier et al. 1999; Webler and Tuler 2006) or the management of land and water (Clarke 2002; Pini, Previte and Haslam-Mckenzie 2007; Rutherford et al. 2009; Steelman and Maguire 1999). Other scholars analyzed stakeholder perceptions in relation to specific services: fire management (Ockwell, 2008), neighborhood interventions (Durose et al. 2015) and healthcare services (Dickinson et al. 2014; Van Eijk and Steen 2014). Knowledge on different stakeholder views is relevant to policymakers who want to resolve policy controversies and incorporate the demands of different stakeholders in policy plans. Van Eeten (2001) for instance found new ways to think about a Dutch airport expansion. By analyzing the frames of different stakeholders, he presented a more constructive policy agenda that balanced economic arguments with alternative societal and ecological policy options (Van Eeten 2001, 405-408). Comparably, Leong (2015) studied the controversial privatization of water utilities in Indonesia through different discourses of anti-privatization groups. A binary debate between people that blamed either greedy private operators (‘Profiteers’) or incompetent government action (‘Ineffectual Governor’) was unconstructive. A discovered third frame (‘Goliath’) stressed the responsibility of both private operators and government for improving the water utilities. By proposing this alternative frame, the Q-study “holds some promise for breaking the deadlock between the pro and anti-water privatization coalitions” (Leong 2015, 618). Q-methodology and its resulting stakeholder analysis can thus help practitioners to move heated debates in more constructive directions.

Rigor: two types of representativeness

Q-methodology has the potential to uncover relevant knowledge for public administrators on role conceptions, policy stances and stakeholder views. Nevertheless, Q-methodology is not without limitations. A possible weakness is that the set of statements that respondents rank (Q-set) is not representative for all perspectives on a given topic (Akhtar-Danesh et al. 2008, 765-766). This is important, because Q-methodology seeks to describe a population of views, which cannot succeed whenever relevant views are missing. From the 31 reviewed articles, 30 reported on how the authors obtained the final set of statements. A deductive approach was part of 10 studies, selecting statements on the basis of academic literature, policy documents and news coverage (e.g. Clarke 2002; Pini et al. 2007). A more inductive course was taken in 6 studies, retrieving statements through focus groups and interviews (e.g. Selden and Brudney 1999; Van Eijk and Steen 2014). The other 14 studies included both measures to ensure statement rigor (e.g. Cuppen 2012; Palmer 2013). Despite all measures to ensure Q-set representativeness, Sullivan and colleagues are correct when stating: “While every care was taken to ensure the Q-set in this study was as comprehensive as possible, and refined yet further through the pilot study, no Q-set can ever be exhaustive” (2012, 58).

Apart from statement representativeness, Q-methodology falls short in terms of population representativeness (external validity). Due to purposive sampling (rather than probability sampling) and small sample sizes of just above 61 respondents on average ($\mu = 61.53$, $\sigma = 42.70$), the authors of all 31 studies acknowledge that they cannot generalize their findings. Although small samples are not problematic for the Q-analysis itself, De Graaf et al. (2014, 22) like many others believe that to increase practical relevance “more quantitative research which makes statistical generalizability possible, would be interesting”.

Concluding remarks: Q for PA?

This article included a systematic literature review on Q-methodology in top public administration journals between 1995 and 2015, to find out whether Q-methodology can address the weaknesses of current quantitative and qualitative methods in public administration.

By analyzing 31 applications of Q-methodology in public administration, it becomes clear that Q-methodology potentially offers a valuable method to study role conceptions, policy stances and stakeholder views. The findings of Q-studies are relevant to practitioners as they: stimulate reflection and awareness on the roles and representation of public administrators, enable policymakers to improve implementation on the basis of different policy preferences and allow for resolving policy controversies through analyzing stakeholder views. A Q-methodological research agenda that follows current developments in public administration could add knowledge on for instance: changing role conceptions and representation of public administrators as a result of New Public Management and New Public Governance (Denhardt and Denhardt 2015; Kettl 2015), successful implementation of innovative reforms, including smart city governance and open data initiatives (Meijer and Bolívar 2016; Zuiderwijk, Janssen and Dwivedi 2015), and stakeholder alignment in the case of co-production in new welfare arrangements (Brandsen and Honigh 2015; Voorberg, Bekkers and Tummers, 2015).

Whereas current quantitative research in public administration is weak in terms of contextual realism and qualitative scholarship misses structured analysis, the most important strength of Q-methodology is “its combination of an interpretative approach with the rigor of statistical analysis” (Stirling et al. 2003, 10). Q-methodology potentially provides better understanding of subjectivity than quantitative research, and is more systematic in its analysis than qualitative research (Baker et al. 2006, 17-18). However, Q-studies can hardly establish fully representative sets of statements and lack external validity.

Therefore, it seems promising to use Q-methodology as a bridging methodology between qualitative and quantitative methods (Akhtar-Danesh et al. 2008, 760). Qualitative interviews and pilots could inform Q-methodology to find a Q-set that is as representative as possible (Watts and Stenner 2005, 75). Survey research could test in a final stage whether the identified viewpoints from Q-studies prevail in a larger population (Danielson 2009, 25-26). Although integrating these three methodological approaches is time-consuming, it may add value to larger research projects. A combination of qualitative, Q-methodological and quantitative methods at least promotes the scientific rigor and practical relevance, public administration research is aiming for.

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Appendix

Table 1. Empirical Q-studies in Public Administration Journals

Journals (alphabetically)	Number of empirical publications (%)
Administration & Society	5 (16%)
American Review of Public Administration	0 (0%)
Canadian public policy	0 (0%)
Climate Policy	0 (0%)
Environment and planning C-Government and Policy	0 (0%)
Governance: An International Journal of Policy Administration and Institutions	0 (0%)
International Public Management Journal	0 (0%)
International Review of Administrative Sciences	1 (3%)
Journal of Comparative Policy Analysis	0 (0%)
Journal of European Public Policy	0 (0%)
Journal of European Social Policy	0 (0%)
Journal of Policy Analysis and Management	2 (6%)
Journal of Public Administration Research and Theory	3 (10%)
Journal of Public Policy	0 (0%)
Journal of Social Policy	0 (0%)
Journal of Self-Government	0 (0%)
Local Government Studies	1 (3%)
Policy and Politics	0 (0%)
Policy Sciences	6 (20%)
Policy Studies Journal	1 (3%)
Public Administration	1 (3%)
Public Administration and Development	0 (0%)
Public Administration Review	6 (20%)
Public Management Review	3 (10%)
Public Performance and Management Review	0 (0%)
Regulation & Governance	1 (3%)
Review of Policy Research	1 (3%)
Review of Public Personnel Administration	0 (0%)
Science and Public Policy	0 (0%)
Social Policy and Administration	0 (0%)
Total	31 (100%)

Table 2. Country of data analysis

Country	Number of publications (%)
United States	12 (39%)
The Netherlands	6 (19%)
England	3 (9%)
Multi-country studies	3 (9%)
England, The Netherlands	
Denmark, England, The Netherlands	
Denmark, England, The Netherlands, Scotland	
Australia	2 (6%)
Northern Ireland	1 (3%)
Canada	1 (3%)
Wales	1 (3%)
Indonesia	1 (3%)
Total	31 (100%)

Figure 1. The number of empirical Q-studies in Public Administration journals

