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Public managers' attitudes towards networks: different motivations, different attitudes

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Abstract

The success of collaborative networks relies on interactions between participants, which involve costs and are uncommon. We argue that participation in interactions is explained by participation attitudes, which, in turn, stem from motivations; and we propose a model that links a wide range of motivations and attitudes. It was tested with a survey that involved 120 public managers who participated in a pro-sustainability network of municipalities in Zaragoza. While the links between motivations and attitudes are complex, it was found that organisational-level internal motivations and managers' identification with the network are more powerful than external rewards for preventing free-rider behaviours.

Keywords: public managers, participation attitudes, motives, governance networks, social identification.

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Complex environmental and social challenges, such as climate change, poverty and population ageing, can only be tackled through collaborative networks, as the resources, knowledge and powers necessary to solve them are distributed between multiple stakeholders (Ostrom, 2010). While research on the effect of networks on performance is not entirely conclusive, some evidence suggests that network participants tend to perform better in terms of the goals pursued as a result of their involvement in these networks. For instance, Ashraf et al. (2019) showed that networks foster the adoption of clean technologies by firms, and Steffen, Schmidt and Tautorat (2019) found that membership of the C40 network has a positive effect on investment in utility-scale solar photovoltaics. Consequently, it is widely suggested that multi-actor and multi-scalar collaborative networks should be promoted.

Broadly understood, a network consists of a set of actors or nodes, together with a set of ties that link them (Borgatti and Halgin, 2011). Therefore, a wide range of networks has been described and studied (e.g. Keast et al., 2004; O'Leary, Gerard and Bingham, 2006), and it has been suggested that network management could be contingent on network type (Cristofoli, Trivellato and Verzillo, 2019). Consequently, we need to define the type of network we study. We focus on learning-led collaborative governance networks. Building on Powell, Koput and Smith-Doerr (1996) and Klijn and Koppenjan (2015), we understand networks as voluntary, negotiated inter-governmental arrangements aimed at sharing knowledge (and other resources) and co-creating new knowledge, in order to improve the quality of their members' policy-making in challenging areas where most governments lack the necessary knowledge-base (e.g.

climate change). Under this definition, the focus is on inter-governmental relations, although networked governments are also supposed to collaborate with their stakeholders. Moreover, the primary purpose of collaboration is co-learning; governments are expected to coordinate their strategies and actions, and jointly implement several policies, but they are free to make decisions regarding what to learn and what to implement in their municipalities. Examples of these types of networks in the climate change area (i.e. our research setting) include international networks, such as C40 cities, the EU Covenant of Mayors or the UN Compact of Mayors, and regional or provincial networks of neighbouring municipalities that are more strongly interlinked, such as the one we studied (i.e. REZ21).

Research on governance networks is extensive and has provided important insights into the management of public sector networks (e.g. Keast et al., 2004; O'Leary, Gerard and Bingham, 2006; Mandell and Keast, 2008; Provan and Kenis, 2008; Klijn and Koppenjan, 2015). However, significant gaps remain (Cristofoli, Meneguzzo and Riccucci, 2017). In particular, it is widely argued that the success of collaborative governance networks relies on frequent and intense interactions between participants (e.g. Provan and Milward, 1995; Innes and Booher, 2010; Keast and Mandell, 2014). However, it is not entirely clear why participants should spend their time and energy and incur economic and opportunity costs to participate in such interactions, instead of adopting free-rider behaviours or abandoning networks (Wood and Gray, 1991; Alter and Hage, 1993; Jones, Hesterly and Borgatti, 1997; Shaw, 2003). While several different theories have been developed to explain participation in networks, there is no consensus on which motivations are most salient (Wood and Gray, 1991; Fleishman, 2009; Esteve et al., 2012). We draw on prior research that studies the link between motivations, attitudes and behaviours (e.g. Fishbein and Ajzen, 1977; Deci and Ryan,

1985; Kim, Kim and Wachter, 2013) to argue that the interaction effort of network members (i.e. a behaviour) is explained by the positive attitudes they have towards the networks in which they participate. These, in turn, are influenced by the level reached by a set of factors representing the different reasons for their participation (i.e. motivations). Consequently, we study the link between a wide range of motivations and attitudes. Although not a behaviour in itself, a positive attitude (particularly, a conative attitude or behavioural intention) represents an immediate precursor to the behaviour of actively participating in the network (Fishbein and Ajzen, 1977; Conner, 2016).

It has been suggested that one of the major tasks facing network orchestrators is to motivate participants to remain active in the network (Provan and Milward, 1995; Agranoff and McGuire, 2003; Dhanaraj and Parkhe, 2006). This means that the insights obtained in this research should prove highly informative for them. As the network we studied was developed for tackling complex social and environmental challenges, our findings are also critical from a social perspective.

While some cross-sectional works have studied the drivers of participation in non-profit and public sector networks (Guo and Acar, 2005; Gazley and Brudney, 2007; Fleishman, 2009; Esteve et al., 2012; Conner, 2016), no previous research has analysed the joint effect of the wide range of motivations and types of attitudes that we have considered. Our research is relatively comprehensive, as it is informed by theories from economics and social psychology, focuses on both the organisation and its representative manager, and considers attitudes that are related to the cognitive, emotional and behavioural part of individuals. Specifically, our research question is as follows: what motivations explain the attitudes of public managers towards the networks in which they participate? As we considered a wide range of motivations and

attitudes, which is unusual, our research provides a detailed and nuanced response to the research question.

Research Setting

The network we studied (REZ21) was a learning-led collaborative governance network, as it was made up of governments that voluntarily decided to collaborate on tackling sustainability challenges. These governments shared knowledge, costs and risks, and jointly co-created the new knowledge required to fulfil their purposes. The relationships between governments was negotiated and non-hierarchical (Agranoff 2012; Emerson, Nabatchi, and Balogh, 2012; Klijn and Koppenjan, 2015). REZ21 was made up of 190 municipalities and promoted in Spain by the provincial government of Zaragoza. It was intended to foster sustainability by developing environmental audits and participative action plans. Within REZ21, sustainability was understood in a broad sense (i.e. it included environmental, social and economic issues), although, in practice, the focus was on environmental issues. Municipalities are the lowest level of government in Spain. The country is divided into regions (so-called autonomous communities), provinces and, lastly, municipalities. Spain is a decentralised country, which means that powers are shared between the different tiers of government.

In Zaragoza, the population is very unevenly distributed throughout the region. Most of the population in the province is concentrated in its capital, which is also called Zaragoza (approximately 665,000 inhabitants). The remaining inhabitants (approximately 300,000) are distributed over 292 municipalities, of which 201 are villages with fewer than 500 inhabitants.

REZ21 is a response to the United Nations approach to sustainability governance, which was first defined at the United Nations Summit held in Brazil in

1992 and which was reinforced at later summits. The United Nations approach focuses on promoting multi-scalar, multi-sector and multi-actor networks as the best model of governance for sustainable development (Jänicke, 2017). While the members of the network are the municipalities and the promoter/orchestrator (i.e. the provincial government), municipalities are expected to involve their local stakeholders.

REZ21 was promoted in 2005. The main rationale for the creation of this network is clear: as most municipalities in Zaragoza are very small, they are virtually unable to meet their sustainability-related goals in isolation because they lack the necessary human-, knowledge- and economic-related resources. Additionally, neither the provincial government nor the municipalities exercise complete power over the different policy areas. The network is supposed to provide economic and knowledge resources (e.g. methodologies or best practices) to support municipal pro-sustainability activities. Municipalities collaborate to develop action plans, by monitoring indicators and specific projects (e.g. new ways of waste management). Due to its unique features, the city of Zaragoza is not included in REZ21, but it pursues its sustainability goals in isolation.

REZ21 is a suitable research setting for several reasons. Firstly, participation is voluntary. While municipalities learn together and develop common knowledge, each municipality is free to choose its own level of involvement with the network and to implement (or not) the knowledge developed by the network (Wood and Gray, 1991). Secondly, the municipalities in Zaragoza are very small, which means that they are particularly interesting for our purposes. The inter-organisational network approach, which we used as a starting point, is focused on calculative, externally-driven motivations, such as accessing network resources. These types of motivations could be particularly salient for small municipalities, which are heavily dependent on external

resources. Therefore, if we observe that the inter-organisational network approach is not as salient in our context, we could tentatively interpret that it could be likely to be even less salient in the case of bigger municipalities, which are not as dependent on external resources. Moreover, small municipalities have been understudied till now (Kim and Peng, 2018).

Conceptual Background, Model and Hypotheses Development

The model proposed is aimed at explaining the attitudes of municipalities towards participating in networks (see Figure 1).

Figure 1 about here

Outcome Variables: Participation Attitudes

Participation attitudes are the outcome variables of the model proposed. Fishbein and Ajzen (1977) define an attitude as a learned predisposition to respond in a consistently favourable or unfavourable manner with respect to a given object. Attitudes are categorised as cognitive, affective, and conative/behavioural (Rosenberg and Hovland, 1960).

Cognitive attitudes are usually represented by the concept of value, which is understood as 'a judgement comparing what is received (e.g. hedonic or utilitarian performance) to the acquisition costs (e.g. financial, psychological or physical effort)' (Oliver, 2010, 23). Affective attitudes tend to be represented by the concept of satisfaction (Kim, Kim and Wachter, 2013), which is understood as the user's fulfilment response to an object of service in terms of pleasantness (Oliver, 2010); pleasantness means 'pleasure increasing or pain reducing, as when a problem in life is solved' (Oliver, 2010, 8). Conative/behavioural attitudes have been represented by the concept

of behavioural intentions, which refers to ‘a stated likelihood to engage in a behaviour’ (Oliver, 2010, 23).

Overall, prior research has shown that an adequate explanation of future behaviours should take all three types of attitudes into account (Cronin, Brady and Hult, 2000; Lam et al., 2004). For instance, high satisfaction could not be coupled with high behavioural intentions (e.g. satisfied participants who adopt free-rider behaviours). We considered participation attitudes instead of actual participation for two reasons: (1) objective measurements of effective participation were not available in our research context, and (2) current participation does not necessarily explain future participation (e.g. currently active but dissatisfied members).

Explanatory Variables: Participation Motives

Motives for participating in networks have been examined on different levels, including the network, organisation and individual levels (Brass et al., 2004). These three levels are interconnected because organisations are managed by individuals and represented by individuals within networks. Therefore, our model was informed by broad literature on the motives that explain why individuals/organisations decide to spend money, time and energy in collaborative arrangements, although particular attention was paid to the literature on participation in public sector networks.

Literature on participation in public sector networks has mostly been informed by the Inter-organisational Networks Approach (Galaskiewicz, 1985; Oliver, 1990; Powell, Koput and Smith-Doerr, 1996). This perspective provides three important motives for participating in collaborative governance networks, which are rooted in three strongly established theories (Keast, 2014): (1) obtaining internally unavailable resources of an economic nature (e.g. money, goods, information or power) that are necessary to meet organisational goals. This motivation builds on the Resource

Dependence Theory (Salancik and Pfeffer, 1978; Hillman, Withers and Collins, 2009); (2) participating in valuable (i.e. perceived returns greater than perceived costs) exchanges of a social nature (e.g. status or image). This motivation draws on Social Exchange Theory (Levine and White, 1961; Blau, 1964; Cook, 1975); and (3) acquiring legitimacy by obeying dominant practices. This motivation derives from Institutional Theory (Oliver, 1990).

While the Inter-organisational Networks Approach provides important insights into understanding participation in networks, it does not offer a complete picture of organizations' and managers' motivations for two reasons: (1) it focuses on external rewards; the internal goals and capabilities of the focal organisation are not explicitly considered; (2) the role of managers as both representatives of the focal organisation and individuals is neglected. Our model takes a step towards covering these gaps.

Firstly, according to the resource-based view of organisations (Barney, 1991), external resources are not valuable if they are not properly amalgamated with the internal resources/capabilities of the organisation to meet the goals pursued. Therefore, we need to consider both the organisation's internal goals and resources/capabilities. In particular, the alignment of the network purposes with those of the organisation needs to be considered. This is important, as most motivation theories tend to suggest that internal motivations are more pressing than external rewards (Deci and Ryan, 1985). Consequently, we included the concept of shared purpose in our model to supplement the Inter-organisational Networks Approach. It refers to the fit/matching of the focal organisation's goals and network purposes. Also, in a learning context, the capacity of the focal organisation to take advantage of the effort devoted to network participation should be considered. Specifically, its capacity to absorb the knowledge generated by the network should prove crucial, as the network is conceptualised as a learning-led

network. Participation would not be worth it if the focal organisation was unable to internalise the knowledge generated by the network. This capacity is included in our model through the variable absorptive capacity (Cohen and Levinthal, 1990; Zahra and George, 2002).

Secondly, we need to consider the role of managers as both organisational representatives and individuals in our model. The role of managers as organisational representatives has been discussed by the agency and stewardship theories of management. The starting point for the agency theory is that managers are self-interested and pursue only their own interests, which implies that they should be controlled and incentivised with external rewards to align their interests with those of the organisation (Eisenhardt 1989). By contrast, the stewardship theory of management (Davis, Schoorman and Donaldson 1997) suggests that organisational representatives may be guided by high-level needs (e.g. competence, self-concept or affiliation), which means that people feel better when engaging in professional and pro-organisational behaviours that sometimes go beyond what is demanded (citizenship behaviours). While both theories involve contrary assumptions, they are coincident in that managers could be motivated for pursuing organisational goals whether externally (agency theory) or autonomously (stewardship theory). This means that considering organisational goals and capabilities and organisational rewards as motivational levers of managers makes sense.

For incorporating the role of the manager as an individual, we drew on Social Capital and Social Identity Theories. Overall, both theories suggest that people may perceive some benefits, whether economic, social and/or emotional, when attaching to groups, such as a network. Social capital theory focuses on the conditions that facilitate coordination and collaboration for mutual benefit (Putnam, 1995). It is argued that

social capital exists when members trust each other and have a strong identification with the collective (Nahapiet and Ghoshal, 1998). According to Social Identity Theory a major motivation of individuals is relatedness/affiliation for two major reasons, which are inter-related (Tajfel and Turner, 1979; Abrams and Hogg, 1990): (1) attachment to groups may enhance an individual's self-esteem, which is self-evaluated in terms of the prestige, status and social valence of the groups to which they feel they belong (Abrams and Hogg, 1990); and (2) attachment to groups may reduce uncertainty; by belonging to groups, individuals know who the others are and how to behave, which reduces their uncertainty (Hogg, 2000). When individuals identify with networks, a powerful mechanism comes into play: they merge their own personal identity with the identity of the network and internalise network goals as their own goals. The above considerations led us to include both trust and network identification as sources of managers' motivation in our model.

Hypotheses Development

Organizational-level External Motivations

Literature on governance networks has focused on organisational-level external rewards. More specifically, public sector networking literature has mostly considered resource dependence theory, social exchange theory and institutional theory to explain participation (Keast, 2014). These theories are behind the broader literature on inter-organisational collaboration (Galaskiewicz, 1985; Powell, Koput and Smith-Doerr, 1996). As explained above, we considered them as a starting point.

Resources. The basic assumption of the resource dependence theory is that individual organisations do not have all the economic resources they require to achieve their goals and rely on external resources (Salancik and Pfeffer, 1978; Hillman, Withers and Collins, 2009). Accordingly, the primary function of network membership is the

attainment of the desired resources of an economic nature (Alter and Hage, 1993; Agranoff and McGuire, 2003; Guo and Acar, 2005; Gazley and Brudney, 2007). Although resource dependence theory focuses on the notion of dependency, even relatively independent organisations may participate in networks to take advantage of external resources (Fleishman, 2009). In our context, the network orchestrator is expected to provide various types of resources, including financial, human (e.g. experts) and technical support (e.g. a common methodology for devising and monitoring action plans). These resources could be particularly important for the small, resource-constrained municipalities we studied. Therefore, we propose the following:

> Hypothesis 1 (a, b, c): a positive relationship exists between availability of resources and participation attitudes (where, [a] refers to value, [b] to satisfaction, and [c] to behavioural intentions).

Learning. Learning has been considered a major benefit derived from inter-organisational networks (Pittaway et al 2004). Learning is particularly important in our context; a complex mix of knowledge is needed to implement sustainability processes, which includes methodology for designing and implementing strategies, awareness of the content of environmental, technological, social and economic issues and their interrelations, and the creation and running of forums that encourage the participation of local stakeholders. The network is expected to agglutinate valuable collective knowledge that is created and shared through member interactions (Wasko and Faraj, 2000). Therefore, we propose the following:

> Hypothesis 2 (a, b, c): a positive relationship exists between learning and participation attitudes.

Voice. Municipalities may see networks as a source of power for promoting their worldviews and desires (Sabatier, 1993; Fleishman, 2009;). Specifically, by

participating in network decision-making, municipal managers can influence network-level goals, priorities, programmes and activities (Mohr and Spekman, 1994; Ansell and Gash, 2008). To capture this idea, we included the concept of 'voice' (Carson, Tesluk and Marrone, 2007). Voice is understood as the degree to which participants have an effect into how decisions are made. Much research on public sector networks suggests that voice could affect the engagement of municipalities in collaborative processes (e.g. Adger, 2003; Ansell and Gash, 2008; Crosby, Hart and Torfing, 2017). Therefore, we propose the following:

Hypothesis 3 (a, b, c): a positive relationship exists between voice and participation attitudes.

Image enhancement. According to social exchange theory, the desire for social rewards is what leads organisations to enter into collaborative arrangements (Levine and White, 1961; Cook, 1975; Das and Teng, 2002;). A major social reward for public organisations could be image enhancement (Dutton and Dukerich, 1991; Doering et al., 2019). The attitudes of public managers towards the networks in which they participate could be affected by how significant others outside the organisation judge them (Dutton and Dukerich, 1991). Specifically, participation in a pro-sustainability network could contribute to enhancing the municipality's image in several ways. Firstly, sustainability and climate change are increasingly shared social and political concerns. Therefore, by participating in pro-sustainability networks, municipalities may show their civil societies, peers and higher tiers of government that they are active in promoting sustainability (Bramwell and Alletorp, 2001). Secondly, working collaboratively could palliate the dominant image of governments as close and bureaucratic (Barzelay, 1992). Lastly, by collaborating, municipal managers can show significant others their skills and

expertise and showcase the best practices of their municipalities (Dholakia, Bagozzi and Pearo, 2004). Therefore, we expect the following:

Hypothesis 4 (a, b, c): a positive relationship exists between image and participation attitudes.

Legitimacy. Institutional theory suggests that organisations adopt the behaviours that are prevalent in their environment in order to gain legitimacy, although they may not be the most efficient and/or effective (DiMaggio and Powell, 1983). Some behaviours reach a level of legitimisation where most actors adopt them and failure to do it is seen as irrational and negligent. Accordingly, legitimacy is consistently included as an antecedent of collaboration in governance network literature (e.g. Emerson, Nabatchi and Balogh, 2012). Network externality theory provides additional support by stating that the size of a user network is the key driving motivation behind participation decisions (Katz and Shapiro, 1985). In our context, both theories suggest that public managers could develop positive participation attitudes if participation is (or is expected to be) common in comparable municipalities (Galaskiewicz, 1985). Therefore, we expect the following:

Hypothesis 5 (a, b, c): a positive relationship exists between legitimacy and participation attitudes.

Organisational-level Internal Motivations

Organisational-level internal motivations involve motivations rooted in the goals and characteristics of the municipality. We drew on the resource-based view to focus on shared purpose and absorptive capacity.

Shared purpose. Participation attitudes should be expected to be more positive when the municipality and the network pursue similar goals. Municipal managers are unlikely to develop positive attitudes towards networks whose purposes are

incompatible or incongruous with those of the municipality (Wood and Gray, 1991; Krueathep, Riccucci and Suwanmala 2008; Fleishman, 2009). Therefore, we included a dimension that captures the existence of a shared purpose between the municipality and the network as a whole. Specifically, as our governance networks are aimed at fostering sustainability, we considered the degree of involvement of municipality leaders with sustainability challenges. Therefore, we expect the following:

Hypothesis 6 (a, b, c): a positive relationship exists between shared purpose and participation attitudes.

Absorptive capacity. Similarly, the municipality should have the necessary absorptive capacity to participate successfully in the network (Cohen and Levinthal, 1990). Drawing on Cohen and Levinthal, absorptive capacity is understood as the extent to which a municipality can learn and use external knowledge, which is determined by the presence of prior sustainability-related efforts in the municipality. There is extensive evidence of the salience of absorptive capacity for participating in collaborative processes (Zahra and George, 2002). In our context, some case studies on European local governments indicate that sustainability-related prior knowledge is a precursor for adopting further sustainability-led initiatives (e.g. Gram-Hanssen, 2000). Collaborative governance literature also stresses the relevance of previous knowledge as a capacity required for collaboration (Crosby, Hart and Torfing, 2017; Emerson, Nabatchi and Balogh, 2012). Therefore, we propose the following:

Hypothesis 7 (a, b, c): a positive relationship exists between absorptive capacity and participation attitudes.

Manager-level Motivations

As explained above, we built on social capital theory and social identification theory to consider the concepts of trust and identification as representative of manager-level motivations.

Trust. Building on Zaheer, McEvily and Perrone (1998), we define trust as the expectation of an individual that others: (1) can be relied on to fulfil promises, (2) will behave in a consistent and predictable manner, and (3) will act and negotiate fairly when the chance for opportunism is present. When high levels of trust exist, collaboration is facilitated in several ways (Nederhand and Klijn, 2019). Firstly, trust reduces the cost, effort, and conflict of collaboration (Nahapiet and Ghoshal, 1998; Lubell, 2007). Secondly, trust increases the expectation of positive reciprocity (i.e. the belief of others will help the trustee) (Adger, 2003; Klijn et al., 2016). Lastly, trust facilitates the transfer of sticky knowledge, leading to greater performance (Levin and Cross, 2004). Therefore, we expect the following:

> Hypothesis 8 (a, b, c): a positive relationship exists between trust and participation attitudes.

Identification. Identification is understood as the psychological oneness of the focal participant with the network and its members (Ashforth and Mael, 1989). More specifically, Chiu, Hsu and Wang (2006) define identification as a participants' sense of belonging and attachment towards other members in the network and to the network itself. We adopted this definition, which focuses on the emotional side of identification (Ellemers, Kortekaas and Ouwerkerk, 1999). Social identity theory suggests that when municipal managers feel identified with their networks, they merge their own personal identity with the identity of the network, and their self-esteem is affected by the achievements of the network (Ashforth and Mael, 1989). These mental processes are a powerful mechanism for explaining people's positive attitudes towards their in-groups

(Ardichvili, Page and Wentling, 2003; Chiu, Hsu, and Wang, 2006; Tyler and Blader, 2001). Based on this social psychological perspective, there should be a positive relationship between network identification and participation attitude. Therefore, we expect the following:

Hypothesis 9 (a, b, c): a positive relationship exists between identification and participation attitudes.

Covariates

We included three additional municipal characteristics that could affect participation attitudes. Firstly, we considered the expertise of the respondents based on their job tenure. It has been suggested that job tenure affects participation both positively (i.e. expertise is necessary for effective collaboration; e.g. Krueathep, Riccucci and Suwanmala, 2008) and negatively (i.e. long-tenured managers are less likely to develop new strategic actions; see, e.g. Esteve et al., 2012). Secondly, we considered the type of respondent (politician vs. technician). Politicians may differ from civil servants in terms of their goals and perceptions (Korac, Saliterer and Walker, 2016). Lastly, the size of the municipality, as a proxy for its resource availability, was considered.

Methodological Issues

Data Collection

The object of our research consisted of the provincial network of municipalities in Zaragoza (Spain). Each municipality had one representative manager in the network and these managers constituted our sample frame. With the permission of the provincial government, we obtained a list of these managers. They were an appropriate data source due to: (1) their knowledge of the networks; and (2) the perception that public managers

have of the networks influences their conduct as municipal representatives and, in turn, the behaviour of the municipality as a whole (Thamhain, 2003); many managers were mayors, while others were high-level politicians or technicians who may influence the decisions of mayors, who see them as experts (Putnam, 1973). Municipalities are small and connectivity between managers is continuous and intense. The provincial government encouraged municipal managers to participate in the study. Confidentiality was guaranteed. Only average data were reported to the provincial government.

We contacted municipal managers on a random basis. Data were collected through a self-reported survey using computer-aided telephone interviewing (CATI). When the study concluded, 120 municipalities had participated in the study; 45 of the respondents were high-level civil servants, while 75 were politicians. Our respondents accounted for 63.15% of all possible informants (120 out of 190). Our sample was representative in terms of municipality size (Chi-squared = 3.17, p = .37) and geography (see Table 1).

Table 1 about here

We assessed potential non-response bias by looking for differences between early and late respondents, which did not differ significantly in terms of size and in their responses to the study variables, suggesting that concern regarding non-response bias is minimal (Hair et al., 2010). The average experience of local authorities with sustainability planning processes spanned 4.22 years (SD = 2.5). The representativeness of the sample, the expertise of the municipal managers who were interviewed, and the guarantee of confidentiality contributed to the validity of this study (Hair et al., 2010).

Measurements

Verification of the model was performed based on public managers' perceptions. Likert scales with scores between 0 (completely disagree) and 10 (completely agree)

were used. The measurements for the study constructs correspond to the concepts provided in the previous sections of this paper and were adapted, when possible, from existing scales.

Most of the measurements we used were multidimensional constructs. This type of measurement is more typical of private sector management literature. Therefore, we had to adapt the measurements to a public sector setting. For this purpose, a pre-test of the questionnaire was performed using seven municipal managers to assess the logical consistency of the items and their ease of understanding, uniqueness, sequence and contextual relevance (Hair et al., 2010). We asked for suggestions on the item content and structure. Table 2 summarises the measurements used for all the study constructs, together with descriptive statistics.

Table 2 about here

Perceived value (sample item: when comparing advantages and disadvantages, participating in a network is worthwhile), satisfaction (sample item: the outcomes of participating in this network satisfy our expectations) and behavioural intentions (sample item: our intention is to continue in this network) were measured with two items resembling those commonly used in a great deal of previous research (Cronin, Brady and Hult, 2000; Lam et al., 2004).

To measure resources, we adapted three items from Frels, Shervani, and Srivastava (2003), which are designed to capture their quantity, accessibility and quality (sample item: network resources are of high quality). Learning was adapted from Dholakia, Bagozzi and Pearo (2004) (sample item: by participating in this network we get important information). Voice (i.e. participation in decision-making) was adapted from Carson, Tesluk and Marrone (2007) (sample item: participation in decision-making is encouraged). Image enhancement was measured by using three items, which

were adapted from prior research on the context of virtual networks (Wasko and Faraj, 2000; Dholakia, Bagozzi and Pearo, 2004) (sample item: participation in this network positively influences the image of the municipality). Building on Frels, Shervani and Srivastava (2003), we approached legitimacy as the extent to which municipalities perceive that the current activities of the network are going to be dominant. Trust and network identification were measured with three items from Chiu, Hsu and Wang (2006) (sample item for trust: the members of this network are trustworthy; sample item for identification: I have a positive feeling towards the network).

Shared purpose was measured using a two-item latent variable adapted from Howell, Shea and Higgins (2005) (sample item: the relevant people in this city council have been great supporters of sustainability). Following Cohen and Levinthal's (1990) approach, absorptive capacity was measured with two items that referred to the previous experience of a municipality with sustainability issues (sample item: we have a long sustainability tradition).

The covariates (i.e. technician vs. politician, manager's job tenure and municipality size) were measured using observational, one-item measurements. More specifically, municipality size was measured using the natural logarithm of the population of the municipality.

A potential concern in our research was common method variance (CMV). Thus, we adopted some of the procedural precautions recommended by Podsakoff, et al. (2003) to minimise CMV. Firstly, our respondents were experts. Secondly, anonymity was protected. Thirdly, to avoid item ambiguity, we used previously tested items, where possible. Fourthly, as we conducted the questionnaire by phone, we were able to verify that respondents properly understood the item wording and control for the response time. Lastly, we assessed the effects of CMV by running a one-factor model (the

Harman one-factor test). The results showed that the one factor model accounted for only 38.3% of the total variance. This procedure indicated that CMV should not be a concern.

Results

We followed a traditional two-step process to analysing the data; after confirming the appropriateness of the proposed measurements and analysing the descriptive statistics, we ran the structural models.

All measurements showed good internal consistency, with construct Cronbach alphas ranging from .837 to .993. Only interfactor correlations between the three measurements of participation attitudes were above the .65 threshold (Tabachnick and Fidell, 1996). This result fits previous research that shows that cognitive, affective and behavioural attitudes tend to be highly correlated (e.g. Cronin, Brady and Hult, 2000; Lam et al. 2004; Oliver, 2010). The correlations between the remaining variables were below the .65 threshold, indicating that our results are probably not biased by multicollinearity problems (Tabachnick and Fidell, 1996) (see Table 3).

Table 3 about here

We used OLS to test the structural models. This approach was selected to accommodate a large number of items and variables, and a relatively small number of respondents, which discourages the use of structural equations. We modelled all factors as determinants of the outcome variables: value, satisfaction and behavioural intentions. The equation for value was formulated as follows:

$$(1)\ Value_i = \alpha_1 + \beta_{11}(Resources_i) + \beta_{12}(Learning_i) + \beta_{13}(Voice_i) + \beta_{14}(Image\ enhancement_i) + \beta_{15}(Legitimacy_i) + \beta_{16}(Trust_i) + \beta_{17}(Identification_i) + \beta_{18}(Shared$$

$$\text{purpose}_i) + \beta_{19}\,(\text{Absorptive capacity}_i) + \beta_{110}\,(\text{Size}_i) + \beta_{111}\,(\text{Job}$$

$$\text{tenure}_i) + \beta_{112}\,(\text{Technician}_i) + \varepsilon_i$$

In Equations (2) and (3), value was replaced with satisfaction and behavioural intentions, respectively. Stata 12 statistical software was used to analyse the model. We checked for normality before testing models (1) to (3). The Shapiro-Wilk test showed that some variables were not distributed normally (specifically, absorptive capacity, trust, learning, and identification). Therefore, we used the robust regression method to test the structural models. The results are shown in Table 4.

Table 4 about here

For simplicity, we report the results of two stepwise regressions for each dependent variable. Firstly, the results of running linear models (1) to (3) are reported. Secondly, we added the effect of all possible quadratic and interaction terms as a post hoc analysis. It has been suggested that all possible quadratic and interaction effects should be considered together to avoid biases (Aiken and West, 1991). We adopted this approach.

As Table 4 shows, the estimated model appears to satisfactorily explain the data variance, and the inclusion of quadratic and interaction terms significantly improves the explanatory level of the model. A substantial proportion of variance in value (R-squared = .740 and .823 for the quadratic and interaction terms, respectively), satisfaction (R-squared = .779 and .842) and behavioural intentions (R-squared = .708 and .848) is explained.

Hypotheses 1 (a, b), 2 (a, b), 6 (a, b, c), 7 (a, b, c), 8a and 9 (b, c) were confirmed. The results indicate, firstly, that voice (H3), image enhancement (H4) and legitimacy (H5) do not seem to shed light when the other variables are considered.

Secondly, the results suggest that different drivers have disparate predictive capacity when explaining the three participation attitudes.

Only the organisational-level internal motivations, shared purpose and absorptive capacity consistently contributed to the three participation attitudes. Shared purpose, particularly, is shown to have a central role, although its effects are not always linear. The contribution of shared purpose to value and satisfaction adopts a form of decreasing returns. The effect of shared purpose on behavioural intentions, however, shows a form of increasing returns. Additionally, when explaining value and satisfaction, a substitution effect with learning is shown. The strong effect of shared purpose on behavioural intentions ($\beta = .424$ linear, and $\beta = .190$ curvilinear) indicates that the confluence of network and municipality purposes is a major driver of the intention to maintain and strengthen participation.

The contribution of identification to behavioural intentions is particularly crucial. An increasing returns effect is shown ($\beta = .442$ linear, and $\beta = .274$ curvilinear), indicating that identification is the most important variable for explaining behavioural intentions.

Resources are important for explaining value ($\beta = .261$ linear, and $\beta = .120$ curvilinear) and satisfaction ($\beta = .325$ linear, and $\beta = .091$ curvilinear) but do not contribute to behavioural intentions. It appears that behavioural intentions are driven by organisational-level internal motivations (shared purpose and absorptive capacity) and a manager-level collectivist motivation (i.e. identification). A substitution effect between shared purpose and absorptive capacity was also found.

Only one covariate (i.e. technician vs. politician) was proven to have significant effects on value and satisfaction. Politicians appear to be more optimistic about the

network than technicians are. Technicians report lower perceptions of value (β = - .416) and satisfaction (β = - .726). This result could have different interpretations.
It is possible that some politicians are less conscious of the day-to-day difficulties of collaboration and more tempted to demonstrate that a decision to join the network was successful.

Discussion

The purpose of this research was to improve our understanding on the attitudes of participants towards the networks of which they are members. To that end, we proposed a model and tested it in a pro-sustainability network of municipalities. Model building was based on various extensive and broadly used theories from economics/management and social psychology. We attached a major role to network participants as both municipal representatives and individuals. We focused on small municipalities, which have been scarcely considered in literature.

We obtained interesting findings. Firstly, we showed that participation attitudes are not homogeneous, but conceptually singular (i.e. cognitive, affective and behavioural), which implies that they are explained by different motivations. Secondly, when all the results are considered together, they indicate that organisational-level internal and manager-level motivations appear to be particularly salient in explaining participation attitudes, and, more specifically, behavioural intentions. While organisational-level external motivations/rewards seem to matter, they only provide a part of the explanation, and could be associated to negative free-rider behaviours.

More specifically, when considering the variables representing the resource dependence theory, resources and learning appear to contribute to value and satisfaction but not behavioural intentions. Particularly strong is the effect of resources on value and

satisfaction, which is shown to be quadratic. These findings are worrisome as they indicate that, despite perceiving value and satisfaction from belonging to the network, municipal representatives could tend to adopt free-rider behaviours, which could negatively affect network success. Fleishman (2009) obtained similar results. He conducted an exploratory survey on the antecedents of participation (n = 44) and did not find a consistent, significant correlation between resource-related items and participation. Our data attach some relevance to resources but do not link resource availability to behavioural intentions, which is not good news for network orchestrators. The third variable linked to resource dependence theory (i.e. voice as a source of power) does not contribute to attitudes, which could indicate that voice could be a hygiene factor. Managers may consider voice to be a pre-requisite. Therefore, voice may not make managers perceive value or feel satisfied; on the contrary, it will make them feel dissatisfied if it was not provided.

Additionally, no effect is found when the variables representing social exchange and institutional theories are considered. Both image enhancement and legitimacy seem to not affect the attitudes of public managers towards the networks. These results could indicate that legitimacy and image considerations could lead to nominal participation. However, they may not be salient to explaining the in-depth attitudes considered in our model.

Organisational-level internal motivations (both shared purpose and absorptive capacity) consistently contribute to the three participation attitudes considered. These findings attach a special role to the network participants (i.e. municipalities) and could downplay the dominant role that has usually been attached to the orchestrator of the network in collaborative governance literature. It seems that the presence in the municipality of leaders who are great supporters of sustainability was crucial to

pursuing sustainability, which fit theories of change that attach a key role to organisational leaders (e.g. Brown and Osborne, 2012). This result is also consistent with the major role that motivation theories attach to intrinsic/autonomous motivations over extrinsic/controlled motivations (Deci and Ryan, 1985; Lu and Argyle, 1991). While external motivations could be more conducive to free-rider behaviours, internal motivations seem to strongly affect behavioural intentions.

The results of the manager-level variables we considered are also interesting. While trust was shown to have only a marginally significant effect on the cognitive attitude (i.e. value), identification was demonstrated to have a linear effect on satisfaction and a strong quadratic effect on behavioural intentions. The latter suggests that identification could be particularly salient to tackling free-rider behaviours in networks. Identification means that participants merge their own personal identity with the identity of the network, and their self-esteem is affected by the achievements of the network (Ashforth and Mael, 1989), which is a powerful mechanism for preventing free-rider behaviours. Tyler and Blader (2001) obtained a similar conclusion in the context of intra-organisational groups.

While the concept of identification and its relationship with the self-esteem of partners has scarcely been considered by prior collaborative governance literature, a great deal of research has been devoted to explaining and testing the link between a related concept, trust, and network performance (e.g. Ansell and Gash, 2008; Thomson and Perry, 2006; Klijn et al., 2016; Nederhand and Klijn, 2019). Overall, it has been argued that trust reinforces the interaction levels and knowledge gained through collaboration process, which is an instrumentalist argument. Our findings, however, indicate that, when the concept of identification is included in the analysis, trust has more limited predictive capacity. One explanation for this limited effect of trust when

both predictors are jointly considered could be that while trust and identification are interconnected concepts, the latter involves more in-depth emotional feelings. In other words, while trust (i.e. believing in the benevolence of collaborators) does not guarantee identification (i.e. feeling close to collaborators), identification involves trust and other additional positive components such as togetherness and similarity.

It should be noted that prior public-sector cross-sectional research has not considered trust and identification jointly (e.g. Klijn et al., 2016; Cristofoli, Trivellato and Verzillo, 2019), which means that trust could have implicitly acted as a proxy of identification. The focus on trust instead of identification is probably linked to a traditionally dominant organisation-focused view of management, which needs to be supplemented with the more psychological, actor-centred view that characterises emergent management perspectives, such as the new public service logic (Osborne, 2018). As shown in this research, while trust could have cognitive effects (i.e. value), identification has more emotional and behavioural implications. We have found only one cross-sectional research that studies the effect of identification on participation in public sector contexts. Conner (2016) studied the effect of cultural similarities between public officials and external stakeholders on participation attitudes. He found evidence of positive effects. It is important to note, however, that Conner only considered a component or proxy of identification (racial and a co-ethnic identity). This lack of empirical research is not so surprising when you consider that most popular collaborative governance frameworks have not drawn on social identity theory (Agranoff, 2012; Ansell and Gash, 2008; Bryson, Crosby and Stone, 2006; Thomson and Perry, 2006; Emerson, Nabatchi and Balogh, 2012; Crosby, Hart and Torfing, 2017). As a result, the concept of social identification does not appear in these frameworks. An exception to this is the framework from Koschmann, Kuhn and Pfarrer

(2012), which focuses on identity. They argue that networks should be viewed as distinct organisational forms with collective identity. Similarly, Rice (2014) proposed a theoretical approach to collaborative governance that is close to our perspective. She argued that networks are glued together by two logics, the logic of self-interest and the logic of identity. We contribute to her approach by showing that both logics could lead to different effects. Specifically, our findings show that behavioural intentions in networks are not explained by resource availability, but by social identification, which means that collaborative governance frameworks could be enriched from drawing on social identity theory.

While an in-depth discussion of how social identity theory could supplement collaborative governance frameworks goes beyond the scope of this research, some preliminary insights may be derived from prior literature and our empirical study of REZ21. A starting point for social identity theory is a recognition that people identify with multiple collectives that contribute to their self-esteem and/or reduce their uncertainty (Hogg, 2000, 2001). There is also evidence that people identifying with a collective is stronger to the extent that the focal collective (in-group) meaningfully 'distinguishes' them from other relevant collectives (out-groups), and when external circumstances indicate that the focal collective will be successful in the future (Ellemers, de Gilder and Haslam, 2004). These insights were used (although unconsciously) by the REZ21 orchestrator when emphasising climate change threats (i.e. an external circumstance that need to be successfully addressed) and the need to undertake collaborative work as the most appropriate way to tackle this challenge (i.e. a path to success), and positioning alternative behaviours of municipalities as irresponsible, obsolete and increasingly subject to citizen disapproval (i.e. distinctiveness).

Furthermore, social identity theory proposes that social identities are not merely individual perceptions of a network and their members (Tajfel and Turner, 1979; Hogg, 2001). They are, to some extent at least, socially shared conceptions of what the defining and distinctive characteristics of the network are. Therefore, networks may be transformed into social identities with specific content (e.g. common worldviews, norms, values and a shared sense of future direction).

However, there is not a consensus on what the role of the network orchestrator in social identity creation could be. Traditional social identity models of leadership attach a relatively low influential role to the network orchestrator (e.g. Hogg, 2001). They propose that orchestrators (leaders is the term they use) have limited agency; they are only able to influence participants to the extent that they are perceived as prototypical or representative of them. This means that orchestrators should follow an 'inductive' approach to infer the social identity of the network and induce participants to perceive them as prototypical of a positive social identity that they have in common and that distinguishes them (in-group) from relevant others (out-groups). A way of 'inducing' the content of a consensual social identity is fostering or facilitating frequent and intense interactions between participants (Postmes, 2003). The orchestrator could then observe their opinions and behaviours and induce general properties of the network from them.

The REZ21 orchestrator fostered interaction, dialogue and team-work between participants (e.g. they co-participated in decision-making, collaborated to help each other to devise their sustainability plans, and worked together, in small voluntary groups, to solve common uncertainties, e.g. the best way to implement green purchasing or incorporate citizen participation into plans). As participants interacted in REZ21, a salient social identity was generated in subtle and unconscious forms. For instance,

participants used the term ‘we’, showed public signs of group membership which affected their psychological level of identification, some consensus was achieved, and language tended to converge which is indicative of social cohesion (Mandell, Keast and Chamberlain, 2017). The salience of fostering frequent and intense interaction in networks is also emphasized in collaborative governance research. For instance, the composite theory of leadership and management (Keast and Mandell, 2014) sees leadership as a relational process and the leader as a catalyst of relations. However, interactions are mostly viewed as a means to achieve network success. Rather, under social identity theory interactions lead to social identity creation.

Reicher, Haslam and Hopkins (2005) disagree with the low influential role that traditional social identity models of leadership attach to the orchestrator. They argued that a view of orchestrators as ‘entrepreneurs of identity’ (Reicher and Hopkins, 2001) is a better fit for real-world experiences. From their perspective, orchestrators need to discover (or sense) what participants could have in common and rely on these commonalities to build a social identity that leads to the social identification and mobilisation of participants. Orchestrators should actively define a network project to enhance their prototypicality, while participants are not merely passive recipients, but actively weigh and interpret the proposals offered to them. As mentioned above, this view is a better fit for what occurred in REZ21. The orchestrator defined a network project (relatively vaguely, but with the intent of being inclusive, distinctive and challenging), and offered participants the opportunity to co-create more precise content for the network through future workgroups and dialogue.

While more research is needed to establish how social identity theory may contribute to a network theory in the public sector, it is apparent that collaborative governance frameworks should integrate the concept of social identification and the

major tenets of social identity theory, including the prototypicality of the orchestrator, the distinctiveness of the network and the 'induction' of communalities, which have only been marginally considered, at most, within those frameworks.

This research shares the limitations usually attached to cross-sectional studies in specific contexts (i.e. inability to test for causality and use of one data source in a specific setting). Further research could use longitudinal or experimental designs to examine causal relationships in different contexts to verify our conclusions. Despite these limitations, we believe that this study improves our understanding of the drivers of participation in collaborative governance networks by contributing evidence of the salient role of network participants and the social-psychological view, and positions social identity theory as a promising avenue for further research on collaborative governance.

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Figure 1. Model and Hypotheses

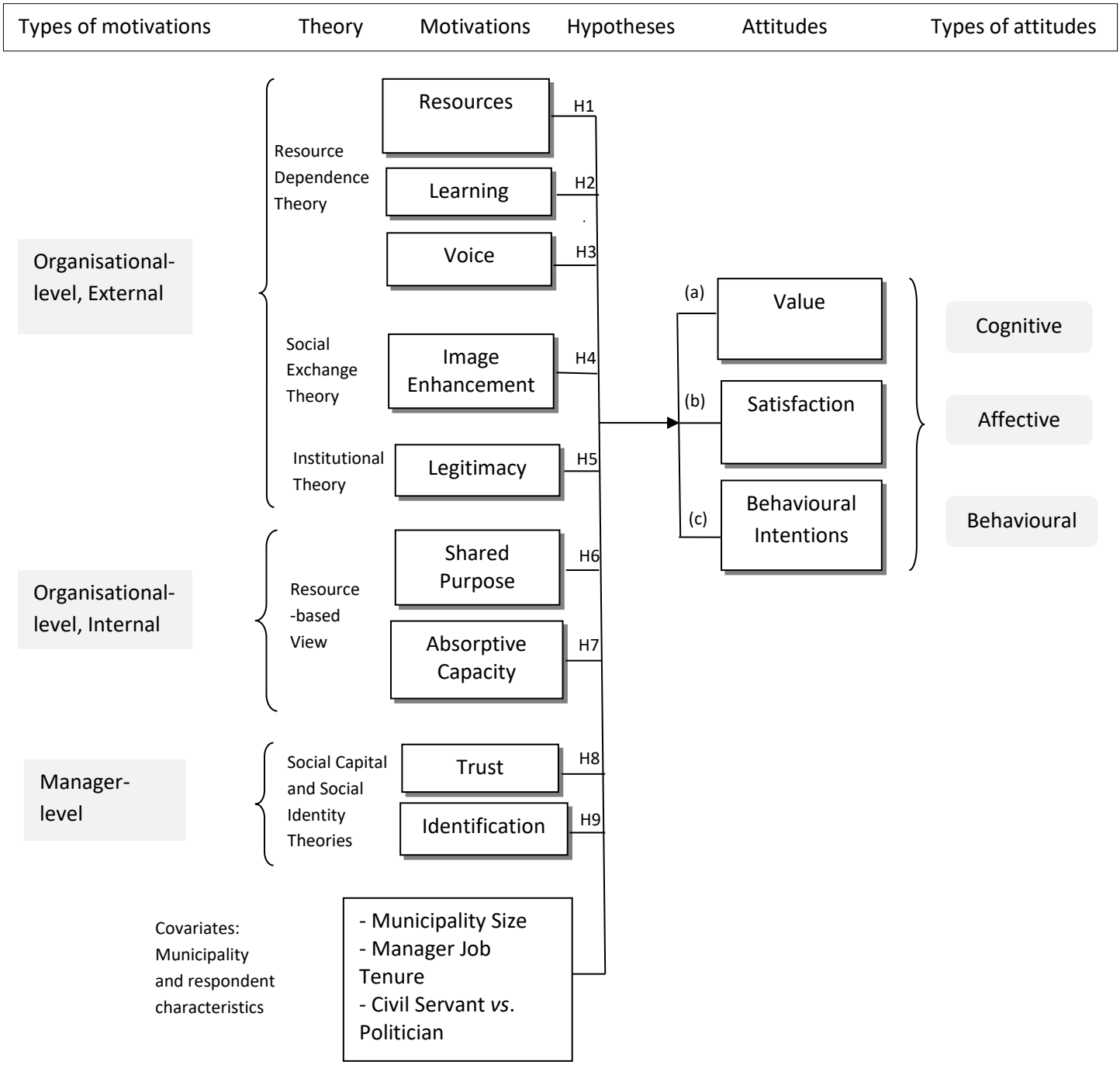

Table 1

Size of Municipalities in the Sample vs. Zaragoza

Number of Inhabitants	< 500	500-999	1000-4999	> = 5000	Total
Zaragoza	201	29	50	12	292
%	68.8%	9.9%	17.2%	4.1%	100%
Sample	73	16	27	4	120
%	60.8%	13.3%	22.5%	3.4%	100%

Notes: Pearson $chi^2(3) = 3.167$; $p = .367$.
The capital of the province is excluded as it cannot be a network member.

Table 2

Item Wording, Sample Statistics and Convergent Validity

Construct and item	Mean	Std. Dev.	Alpha
RESOURCES (Frels et al. 2003)	6.15	1.76	.8922
Many resources are accessible within this network			
Network resources are easily accessible			
Network resources are of high quality			
LEARNING (Dholakia et al. 2004)	3.29	3.56	.9933
By participating in this network, we get important information			
By participating in this network, we learn			
This network helps us to solve problems			
VOICE (Carson et al., 2007)	5.57	2.00	.9282
Participation in decision-making is encouraged			
Everyone who participates in decision-making feels supported			
We participate in decision–making			
There are forums to make joint decisions			
There are ways to participate in decision–making			
IMAGE ENHANCEMENT (Dholakia et al. 2004)	5.90	1.83	.9372
Participation in this network positively influences the image of the municipality			
The political leaders of this province make municipalities that participate in this network feel recognised			
Municipalities that are active in this network are recognised			
LEGITIMACY (Frels et al. 2003)	6.08	1.52	.8403
Many municipalities in the province participate in this network			
The size of the network will increase in the future			
Benchmark municipalities participate in this network			
TRUST (Chiu et al. 2006)	6.65	1.60	.9323
The members of this network behave consistently			
The members of this network are trustworthy			
The members of this network keep their promises			
IDENTIFICATION (Chiu et al. 2006)	6.00	2.14	.8749
I feel close to people who are part of the network			
I have a positive feeling towards the network			
People who are part of the network share many world views			
SHARED PURPOSE (Howell et al. 2004)	6.10	2.26	.8905
There are influential people in my town/city council who have strongly fostered pro-sustainability behaviours			
The relevant people in my town/city council are great supporters of sustainability			
ABSORPTIVE CAPACITY (Cohen and Levinthal, 1990)	6.15	2.31	.9148
In our context, we are a sustainability benchmark			
We have a relatively long tradition of sustainability			
PARTICIPATION ATTITUDES (Lam et al., 2004; Yang and Peterson, 2004)			
VALUE	7.31	1.87	.9528
Participation in the network contributes more benefits than costs			
When counterbalancing advantages and disadvantages, participating in this network is worthwhile			
SATISFACTION	6.84	2.20	.9363
Overall, we are very satisfied with this network			
The outcomes of participating in this network meet our expectations			
BEHAVIOURAL INTENTIONS	8.05	1.62	.8376
Our intention is to remain active in this network			
We are going to intensify our participation in this network			

Table 3

Correlation Matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Value (1)	1														
Satisfaction (2)	.898	1													
Behavioural Intentions (3)	.754	.744	1												
Resources (4)	.541	.574	.424	1											
Learning (5)	.466	.433	.433	.260	1										
Voice (6)	.374	.478	.402	.461	.369	1									
Image Enhancement (7)	.460	.455	.355	.449	.379	.645	1								
Legitimacy (8)	.505	.568	.425	.437	.239	.532	.552	1							
Trust (9)	.334	.321	.281	.415	.193	.399	.516	.338	1						
Identification (10)	.433	.468	.435	.380	.493	.429	.410	.304	.402	1					
Shared Purpose (11)	.599	.592	.610	.360	.469	.434	.457	.456	.299	.387	1				
Absorptive capacity (12)	.409	.406	.534	.306	.303	.306	.335	.312	.233	.417	.604	1			
Population (13)	.308	.210	.265	.059	.375	.117	.066	.092	.072	.145	.295	.071	1		
Technician vs. Politician (14)	.082	.078	.230	.138	.174	.130	.149	.081	.013	.354	.192	.443	.047	1	
Manager Tenure (15)	.014	.021	-.028	.081	-.003	.178	.120	.127	.142	-.113	.087	.103	.129	-.079	1

Note: All correlations above .19 are significant at .05 level.

Table 4

Structural Model Estimation

Predictors/Attitudes	**Value**				**Satisfaction**				**Behavioural Intentions**			
	Linear Model		Post-Hoc		Linear Model		Post-Hoc		Linear Model		Post-Hoc	
	Coef.	P>t	Coef.	P>t	Coef.	P>t	Coef.	P>t	Coef.	P>t	Coef.	P>t
Resources (H1)	.173	.036	.261	.001	.		.325	.001	.115	.095		
Learning (H2)	.196	.070	.363	.000			.152	.099				
Voice (H3)												
Image Enhancement (H4)												
Legitimacy (H5)												
Shared Purpose (H6)	.434	.000	.292	.016	.525	.000	.410	.000	.705	.000	.424	.000
Absorptive capacity (H7)	.274	.032	.180	.093	.342	.001	.215	.005			.255	.020
Trust (H8)			.144	.067								
Identification (H9)	.312	.038			.434	.000	.170	.069	.269	.019	.442	.000
Population												
Technician vs. Politician	-.686	.000	-.416	.011	-.977	.000	-.726	.000			-.334	.082
Manager Tenure												
Resources Squared			.120	.000			.091	.006				
Shared purpose Squared			-.238	.005			-.264	.000			.190	.059
*Shared purpose*Learning*			-.260	.004			-.144	.034				
*Shared purpose*Tradition*											-.054	.395
Identification Squared											.274	.000
*Shared purpose*Identification*											-.604	.000
Constant	.316	.003	.416	.001	-.522	.000	.585	..000	-.010	.899	.110	.392
R-squared	.740		.823		.779		.842		.708		.848	

Note: Robust standard errors (Huber–White sandwich estimators) are reported.