

# The Role of Social Capital in the Development of Community-based Cooperatives

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**Abstract** Given tight budget constraints and a backlog in infrastructure investments, small municipalities are seeking new forms of providing public services. In contrast to Public-Private-Partnerships, significant community engagement in financing and running municipal services (e.g. eldercare) in the legal form of a cooperative (Public-Citizen-Partnerships) supports civic democracy on a local level. Critical for the sustainability of community engagement in issues of local development, however, is whether those individuals who initially become involved can access and mobilise valuable social capital. Building on these considerations the paper analyses the following research question: “How can the formation of social capital among community volunteers be described and what are the effects of social capital on the development of community-based cooperatives?” Based on a network model of social capital, we derive a set of hypotheses on the formation of social capital among volunteers engaging in local development projects. The hypotheses are subsequently tested in a large-scale questionnaire in Austria. The results of our study support the findings of Granovetter (1973) and Burt (2001) on the importance of weak ties and structural holes in social networks. On the one hand, critical resources for a community-based organisation can be found in the acquaintance networks rather than friend or family networks of residents. On the other hand, the paper identifies cooperatives as a suitable form of organizing community-based initiatives. Its flexible and open network structure allows to bridge structural holes within and outside the community which facilitates necessary information and resource flows. Our analysis provides valuable insights for policy makers concerned with fostering community engagement through cooperatives. Furthermore, the authors contribute to the debate on social capital and its relation to civic participation and the community context.

## 1 Introduction

The academic discourse on community participation and its relation to economic and political development has a long-standing tradition, going back to the work of Tocqueville (1835/40; 1985). In the contemporary literature, Putnam (1993; 2000) has prominently contributed to this debate, relating civic engagement to the concept of social capital, and the declining levels of trust among Americans. His works were a major influence on the Clinton administration's community development programmes (Lelieveldt 2008). The same community participation rhetoric also gained momentum in the United Kingdom with the politics of New Labour, resulting in several partnership-based neighbourhood initiatives (Taylor 2007).

Local partnership structures have been part of the debate on public sector reform and public downsizing in Austria only since the late 1990s (Hammerschmid and Meyer 2005). It is against this background that policy makers currently emphasise the importance of community participation for local economic development, thereby also referring to Robert Putnam's concept of social capital (Lederer 2009). Similar to the political debate in Germany a few years before (Enquete-Kommission 2002), mayors of Austrian municipalities are encouraged to seek partnerships with citizens in order to deliver vital public services (e.g. eldercare, education, sports and leisure facilities). Furthermore, among the relatively few contributions to the local partnership debate in Germany and Austria, some authors also stress the role of cooperatives as a suitable organisation form for community-based projects for running municipal services because of their democratic governance structure and commitment to self-help principles (Fehl 2000; Flieger 2003; Hofinger and Hinteregger 2007). As Magee (2008) points out, studies in the field of civic participation are traditionally concerned with developing an understanding for the reasons why people engage in civic participation (cf. Wilson 2000). Influenced by Putnam's research, a growing body of literature has since focused on civic engagement as a social resource (Magee 2008). This recent line of research has improved our understanding of various effects of civic participation on an individual's social network (cf. Stricker 2007).

Our paper contributes to this debate by looking at the connections between civic engagement, social networks and the community context. We aim to answer the following research question: "How can the formation of social capital among community volunteers be described and what are the effects of social capital on the development of community-based cooperatives?" In a first step, we develop a multi-dimensional model of social capital which serves as a framework for the subsequent empirical analysis of social networks in small Austrian municipalities. In a second step, employing qualitative data from focus groups with community leaders (Mayring 2008), we derive a set of hypotheses that are tested in a large-scale questionnaire survey, using alternative measurement instruments for social capital. Finally, we discuss the implications of these findings in the context of the development of community-based cooperatives.

## 2 Theoretical Background

### 2.1 Defining Social Capital

As a result of its widespread use in various disciplines and practical fields, social capital has become a heuristic concept generating controversy about its definition, conceptualisation and measurement (Lin 1999; Lin and Erickson 2008). Prominent researchers in the field, however, agree that social capital refers to investments of individuals in social relations and expected returns (cf. Bourdieu 1983/1986; Coleman 1991; Burt 1992; Lin 1999; Portes 1998; Putnam 2000). While there is also broad consensus that social capital can be seen as both, an individual or collective asset, confusion arises from a purely macro level of analysis. “[E]xtending the notion of social capital beyond its theoretical roots in social relations”, or even equating it with collective assets such as trust or norms, leads to major conceptualisation and measurement problems (Portes 1998; Lin 1999, p. 35). Thus, Lin (1999) suggests that meaningful research on social capital has to be based on a social network view. This fundamental insight leads us to a definition of social capital as access to embedded resources and their purposive mobilisation by individuals “to enhance expected returns of instrumental or expressive actions” (Lin 1999, p. 39).

### 2.2 The Formation of Social Capital

Based on the above definition, Lin (1999, pp. 41) proposes a conceptual model of social capital that consists of three blocks of variables which are interconnected:

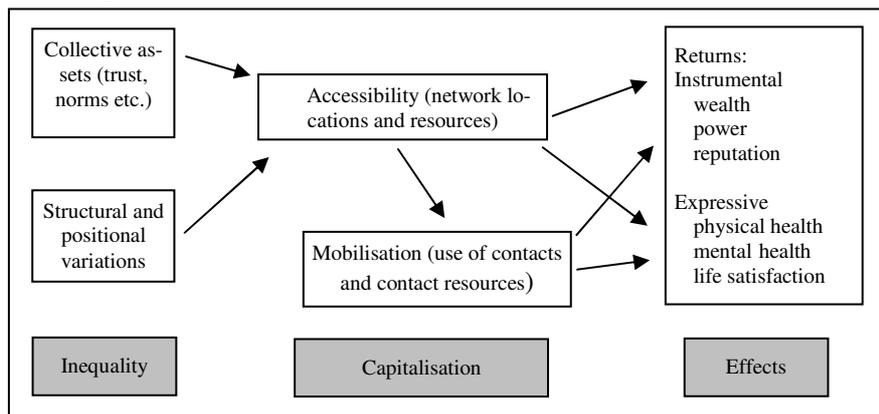


Fig. 1: Model of social capital (Lin 1999, p. 41)

1. The first block represents structural variables that affect the individual's access to social resources and their mobilisation. These structural elements mediate the extent to which individuals can accumulate social capital (Lin 1999). Structural variables are also responsible for the unequal distribution of access to, as well as embeddedness, access and mobilisation of social resources. Thus, in order to develop an understanding of the formation of social capital among (potential) community volunteers, we need to consider the social structure of a community, as well as a resident's position in the social structure.
2. The second block of variables refers to the features of an individual's social network that determine access to and mobilisation of embedded resources (e.g. number and diversity of contact resources, strength of ties, network location, use of contacts), altogether, measuring social capital.
3. Finally, the third block proposes possible effects or returns for social capital. Lin (1999, pp. 35) distinguishes between returns on instrumental and expressive actions. Instrumental returns refer to economic wealth, political power and reputation. Each of them "can be seen as added capital" for the ego (Lin 1999, p. 40). As for expressive actions, social capital leads to a consolidation of resources already possessed in the areas of physical health, mental health, and life satisfaction.

### **3 Qualitative Research and Development of Hypotheses**

Within the framework of a multi-level research project the RiCC<sup>1</sup> investigates the conditions for civic engagement in the form of community partnerships. In the initial stage of this study, we carried out focus group discussions with community leaders in three small municipalities, two in Austria and one in Germany. Employing this qualitative data, and putting it into the context of earlier studies in this field, we derive a set of hypotheses on the formation of social capital among community volunteers engaging in local partnerships.

#### ***3.1 The Community Context and Social Capital***

According to Lin's model of social capital (Lin 1999), structural variables are causing variations in the degree to which individuals can accumulate social capital. Empirical evidence shows that network composition is especially influenced by geographical location, in a way that personal networks in rural areas differ from those in urban settings in terms of diversity and density (Beggs et al. 1996;

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Enns et al. 2008). Onyx and Bullen (2000, p. 38) describe the social capital found in rural areas as “bonding social capital”, pointing to higher degrees of mutual trust and support found among residents in smaller communities than in urban areas.

The qualitative data from our focus groups, collected in municipalities of rural areas, give support to this effect of location on social capital described above. The results also suggest that smaller and more isolated neighbourhoods facilitate the expansion and also diversification of personal networks. Therefore, we propose the following hypothesis:

H1: The community context has a positive effect on an individual’s social capital in ways such that a higher level of community connectedness provides residents (and potential community volunteers) with access to different occupations and wider access to high status occupations.

### ***3.2 Social Capital and Community-based Organisation***

A wide range of resources is needed to set up a community-based organisation, such as financial support, human capital, political contacts, or access to technological know-how. In contrast to an established organisation with a solid resource base, new ventures more heavily rely on their social capital in order to identify opportunities and acquire complementary resources (Burt 1992). Thus, critical for establishing community-based co-operatives is whether the volunteers who become initially involved can access and mobilise diverse resources embedded in their personal networks. Our data collected from focus groups with community volunteers suggests that personal networks of neighbourhoods provide access to crucial resources for establishing a community-based organisation. Nevertheless, family and friend networks (strong ties) seem to cover only a limited amount of resources. High prestige social capital which enhances instrumental actions such as fundraising, can often only be accessed through the acquaintance network (weak ties). Thus, we propose the following hypotheses:

H2: In small communities, access to prestige and education-related resources is provided through the acquaintance network (weak ties) rather than through friends or family members (strong ties).

### ***3.3 Social Capital and Civic Participation***

While community-based organisations rely on the social capital of their members to acquire valuable external resources, the growing internal resource base makes

them, in return, more attractive for every volunteer. Empirical evidence shows that membership in volunteer organisations leads to an enhanced and also more diversified social capital (Granovetter 1973; Putnam 1993; Putnam 2000; Stricker 2007). In line with this argumentation, our empirical data from focus groups suggests that membership in a voluntary organisation provides access to neighbours with different occupational prestige.

H3: Civic participation affects social networks of volunteers in ways such that it provides them with access to both, low prestige and high prestige social capital.

## 4 Methods

### 4.1 Sampling Frame and Response Rates

In order to test the three hypotheses just proposed, we analyse data from a survey conducted in March 2009 in six small municipalities in rural areas of the two Austrian provinces Lower Austria and Vorarlberg with an average population of 2,898 inhabitants. A total of 1,932 households were selected from a national database as a random sample resulting in a total of 227 (11.7%) returned questionnaires (61 questionnaires from Vorarlberg and 166 from Lower Austria). This analysis is based on those questionnaires with no missing items with respect to the relevant variables for our research question resulting in a dataset comprising of 196 questionnaires.

Compared to Germany, community-based organisations in the form of cooperatives are a rather new phenomenon in Austria, with hardly any cases for empirical research. Thus, the primary purpose of the survey was to examine the pre-conditions for such partnership models in an average Austrian municipality. In the present analysis, the empirical data serve as the basis to develop a better empirical understanding of the connection between civic participation, social capital and the community context described.

### 4.2 Variables and Measures

#### 4.2.1 Community Context

The community context was assessed by a series of questions on the *connectedness of the respondents' neighbourhood* (Coleman 1991; Portes 1998; Onyx and

Bullen 2000; Magee 2008). The items *familiarity*, *friendliness*, *solidarity*, and *trust* were measured indirectly by asking respondents: “How far do you agree with the following statements about the people in your neighbourhood? People know each other, are friendly to each other, support each other and trust each other?” In addition, two direct measures of neighbourhood connectedness were employed. In order to measure trust within the community, we asked respondents: “Imagine you go grocery shopping in the village and notice that you don’t have any money with you. Would a fellow citizen spontaneously lend you 10 euro?” To assess the level of *reciprocity* among respondents, we asked: “What do you think about the following statement: If I help someone to move house, I expect this person to help me too later.” We used four-point scales (“completely agree”, “inclined to agree”, “inclined to disagree”, and “completely disagree”) to measure all the mentioned items.

#### 4.2.2 Social Capital

Social capital was operationalised using a *position* (Lin and Dumin 1986; Lin and Erickson 2008) and a *resource generator* (van der Gaag and Snijders 2005; van der Gaag et al. 2008). While both measurement instruments are based on the same theoretical approach to social capital (cf. Lin 1999), they emphasise different, complementary aspects of access to embedded resources (van der Gaag et al. 2008). By measuring access to different occupations and different occupational status, the position generator is especially useful for the characterisation of social networks that enhance returns on instrumental actions (van der Gaag et al. 2008, p. 27). However, social capital that provides access to higher occupational prestige does not necessarily enhance returns on expressive actions, such as personal support. Therefore, measuring specific domains of social capital with the resource generator is expected to be more suitable (van der Gaag and Snijders 2005; van der Gaag et al. 2008).

As for the mobilisation or actual use of social resources, Bian (2008, p. 84) highlights that this element of Lin’s conceptual model of social capital is difficult to assess through empirical studies. In fact, separating access and use within a study of social capital avoids confounding influences related to the personal context, such as individual needs (van der Gaag et al. 2008).

The position generator in our questionnaire presented respondents with a list of ten occupations. This list can be assumed to be representative for Austria, covering a range of prestige classifications (Ganzeboom and Treiman 2003; van der Gaag et al. 2008). Furthermore, respondents were asked if they had someone with this profession as relatives, friends and acquaintances to obtain a better understanding of the strength of ties in their social networks, as emphasised by Granovetter (1973) and Burt (2001). The social capital measures calculated from the position generator were *highest accessed prestige*, *range in accessed prestige*, *number of different positions accessed*, and *total accessed prestige* (Granovetter

1973; Burt 1992; Lin 2001; van der Gaag et al. 2008). In addition to these four deductive measures, two inductive domain-specific measures were calculated: *high prestige* and *low prestige social capital* (van der Gaag and Snijders 2005).

In the resource generator section of the questionnaire, respondents were presented a list of 17 items referring to different domains of social resources (van der Gaag and Snijders 2005; van der Gaag et al. 2008). Respondents were asked if they had access to a resource through relatives, friends and acquaintances in order to assess the nature of ties. From the resource generator a single deductive measure, the *total number of resources accessed*, was calculated (van der Gaag et al. 2008). Additionally, adapted from van der Gaag and Snijders (2005) and Landhaeusser (2008), we constructed four inductive measures referring to four domains of social capital: *personal support social capital*, *personal skills social capital*, *prestige and education related social capital*, and *marginalised social capital*.

#### 4.2.3 Civic Engagement

Civic engagement was measured by assessing a respondent's actual *participation in civic life* and his or her *commitment to community participation* (Putnam 2000; Magee 2008). As for the level of civic participation, respondents were asked if they had ever volunteered for civic organisations within the community and if they had leadership experience in any civic organisation.

The respondent's commitment to community participation was measured, in a first step, by his or her commitment to community development issues, to volunteering for his or her community, to take a leadership role in community development. A four-answer scale was used to assess each of these items. Finally, we asked the respondent, whether he or she was willing to volunteer for a community-based partnership.

## 5 Results

### 5.1 The Community Context

An overview of the basic measures of community connectedness for the municipalities in our survey is provided in Table 1. According to the findings of Onyx and Bullen (2000) on small communities in rural areas, we would expect to see a high degree of trust and mutual support among residents. In fact, our results indicate moderate levels of neighbourhood connectedness. While respondents' neighbourhoods seem to be of a very familiar (48.6%) and very friendly character (34.4%), intense neighbourhood support (21.6%), reciprocity (18.1%) and trust

(16.4%) are reported substantially less. However, when respondents had to assess the level of trust in a concrete rather than abstract situation, our results remarkably indicate that they characterise their neighbours as very trusting (35.3%).

### ***5.2 Levels of Civic Engagement***

Overall, the results summarised in Table 2 are in line with the findings of Onyx and Bullen (2000) that civic participation plays an important role in the life of residents in rural areas. About two-thirds of respondents have already been active in voluntary organisations, with a third of them also having leadership experience. Volunteer experience within their own community is reported by 44% of respondents. Furthermore, 30% of respondents are highly committed to community-based development and the idea of community-based partnerships. However, only 16% show a high commitment to volunteer for the community and only 12% are willing to take over a leadership role for the community.

### ***5.3 Social Network Characteristics***

A description based on the results of the position generator (see Table 3) provides us with a first insight into respondents' social network structures. From Table 3 we can see that compared to the average access to the occupations listed (67.9%), the occupation of lawyer marks an outlier, although it seems to be a fairly under-represented occupation in the municipalities in our sample. The high diversity of occupations accessed is highlighted by the social capital indicators calculated in Table 5, with respondents reporting an average access to 6.7 out of 10 occupations. Besides, the means of the number of accessed high (3.0) and low (3.6) prestige occupations are fairly similar, which shows that, on average, respondents have access to a variety of occupations, both, high and low prestige positions. In addition, the mean average accessed prestige (51.84) and the mean of highest accessed prestige (79.93) indicates that respondents, on average, have access to resources that possibly lead to high returns in the context of instrumental actions (van der Gaag et al. 2008).

Table 3 and 5 also provide us with information on the strength of ties respondents have to fellow community members with different occupations. From Table 3, we see that across the board most respondents state that their acquaintance network provides them with access to all of the occupations listed in our position generator (45% on average). The relevance of these weak-tie relationships is further highlighted by the average number of positions accessed, as shown in Table 5: On average, 4.5 occupations are accessed through the acquaintance network, compared to only 1.9 through friends, and 0.8 through family members. There are

similar distributions for the tie-strength as far as access to high and low prestige occupations are concerned. So far, our results support Granovetter's hypothesis of "the strength of weak ties" (1973) with acquaintances providing the widest access to occupations, also within the high and low prestige segment, and the friend and family network only covering a low range of occupations.

The results of the resource generator, displayed in Table 4 and 5, provide us with a slightly different picture of the network structures found in our sample, however, generally pointing in the same direction. On average, out of a maximum of 17, respondents access 11.4 different resources, which is an indicator for both, social capital volume and diversity. As we can see from Table 5, in accordance with our findings from the position generator and with earlier studies (Erickson 1996 for Canada, Voelker and Flap 1999 for Eastern Germany, and van der Gaag 2005 for The Netherlands), with a mean of 5.6 accessed resources, the most diverse social network seems to be those of acquaintances. However, the resource generator provides us with more detailed data on the diversity of social networks as it tells us something about the access of respondents to specific social resource collections (van der Gaag et al. 2008).

Prestige and education related social capital represents a first collection of resources that is associated with high status persons and high returns in instrumental actions, thus, and is, thus, closely related to most position generator indicators (van der Gaag and Snijders 2005). Table 5 shows that respondents access, on average, 3.4 out of 6 resources in this domain. As can be seen from Table 4, having good contacts with the media has the lowest score within this social capital domain. With only 34% of respondents reporting good contacts, this is almost the same number that was found by van der Gaag and Snijders for the Netherlands (2005). In the literature, access to prestigious resources is often also associated with weak ties (Granovetter 1973; Lin 2002). Together with our findings based on the position generator, at first view, the data from the resource generator, presented in Table 5, lends support to our Hypothesis 2 that access to prestige and education related resources is provided through weak ties rather than friend or family networks. However, the data from Table 4 further reveals that compared to results from the position generator, the distribution of access provided by different personal networks is remarkably less skewed to the acquaintance network, with the exception of knowing a local council member.

A second group of resource items can be associated with personal skills, which, with the exception of repairing household equipment, mainly refers to "communication related activities", such as motivating people or writing a newspaper article (van der Gaag and Snijders 2005, p. 23). All four items in this category are very popular among respondents, accessed by 65% of them or more, with a mean access rate of 3.1 resources. The data displayed in Table 5 suggest that the widest access to personal skills social capital is provided by the acquaintance network. In contrast, van der Gaag and Snijders found that the resources in this domain were mostly accessed through family members in the Netherlands (van der Gaag and Snijders 2005). However, they used slightly different resource descriptions

whereas we adapted them to the specific research topic of community-based organisations.

The third social capital domain is about personal support activities which have both, an instrumental and expressive character (van der Gaag and Snijders 2005). Table 4 shows that almost every respondent (81% and more) knows someone who provides access to 4 of the 5 resources in this domain. Again, there is an outlier in this group, as significantly fewer respondents (51%) have access to someone in the community who can find a holiday job for a family member. Whereas all of the activities mentioned involve a certain degree of trust, this particular one seems to be a more demanding kind of personal support. Nevertheless, also from our everyday experience, we would assume all of these 5 items to be usually accessed through strong-tie relationships. From the results presented in Table 5, we see that, on average, friends and family members give access to 2.1 personal support resources compared to 1.4 resources that can be accessed on average through acquaintances. A closer look at the scores for every single item in Table 4, however, reveals that the “strengths-of-weak-ties-argument” (Granovetter 1973) cannot be entirely supported for getting access to community members who can help with small jobs around the house and who can find a holiday job for a family member.

Adapted from Landhaeusser (2005), a fourth domain, marginalised social capital, consists of 2 items which refer to social resources linked to disadvantaged groups within the community, such as migrants or unemployed residents. As can be seen in Table 4, less than 50% of respondents have access to socially disadvantaged community members, with the lowest access reported for knowing someone who is longtime jobless (25%). Furthermore, from both, Table 4 and 5, we can see that most of the relationships to socially disadvantaged community members can be described as weak ties.

Finally, we have investigated relationships among different social capital indicators calculated for our sample. As displayed in Table 6, social capital measures from the position generator are overall positively correlated to those from the resource generator, which is similar to what van der Gaag and Snijders (2005) found for the Netherlands. Personal networks with higher accessed prestige and a wide range in accessed prestige also provide access to a variety of resources and also domain-specific resources (van der Gaag et al. 2008). However, in contrast to the results of van der Gaag and Snijders (2005), our data show that having access to more occupations within the community and, especially, low prestige positions provides at least the same level of access to specific resource collections. In other words, position generator measures in our study are not significantly higher correlated to prestige and education related social capital than with personal skills or personal support social capital. To summarise, from the data displayed in Table 6, we can assume that in rural and small community contexts, compared to urban settings, both, networks consisting of high and low prestige occupations, provide access to different domains of social resources.

#### ***5.4 The Relationship between Community Context, Social Capital and Civic Engagement***

In order to test the remaining Hypotheses 1 and 3 on the connections between community context, social capital and civic engagement, we have constructed a correlation matrix which is displayed in Tables 7 and 8. As can be seen in Table 7, three measures of neighbourhood togetherness (familiarity, friendliness and support) are overall positively correlated to social capital measures from the position generator, which are all indicators for network diversity based on prestige and occupations among community members. These results lend to support our Hypothesis 1 that the community context positively affects residents' social capital diversifying access to different occupations and high status occupations. However, the same measures for neighbourhood connectedness show a less significant and positive correlation to domain-specific social capital measures from the resource generator. Surprisingly, as Table 7 shows, measures for neighbourhood characteristics are especially less connected to prestige and education related social capital. This finding suggests that access to high prestige positions within the community does not necessarily mean access to specific resources that are related to occupational prestige. In terms of specific resource collections our analysis rather indicates that the connectedness of smaller, rural communities, in the first place, enhances personal support and less significantly personal skills social capital.

According to Putnam (2000), the level of civic participation is strongly and also positively connected to the stock of social capital within a community. However, Magee (2008) points out that by applying a very broad definition of social capital, Putnam has overlooked potential trade-offs between measures for civic participation, social capital, and neighbourhood connectedness.

As can be seen in Table 8, all three of our measures of civic participation (general volunteer experience, volunteer experience in the community, and leadership volunteer experience) are positively and significantly related to frequently used network diversity measures from the position generator (number of positions accessed) and the resource generator (number of resources accessed). Table 8 also shows a positive correlation between civic participation and domain-specific social capital indicators, suggesting the strongest relation to personal support social capital. Thus, we would assume that civic participation plays a significant role in diversifying a volunteer's personal network. Our results also lend support to Hypothesis 3 that civic participation provides volunteers with access to both, low prestige and high prestige social capital. Nevertheless, the data from Table 8 suggests that effects on access to specific groups of occupations depend on the location and the individual's position within a volunteer organisation. Thus, while general volunteer experience significantly relates to access to high prestige social capital, occupying a leadership position in a volunteer organisation is significantly connected to the access to low prestige occupations.

## 6 Implications

The findings described above need to be put in the specific context of community-based development and related organisations. In contrast to religious organisations or sports clubs, community-based partnerships, especially in the area of local infrastructure development, are of an instrumental rather than expressive nature. These voluntary organisations are very task-oriented with a primary concern on producing an economic output on a collective and also individual level (Gordon and Babchuk 1959). In this respect, we would assume that community-based partnerships, especially in early stages, benefit from volunteers who have potential access to social capital that is related to instrumental actions. According to Lin (1999) and Van der Gaag and Snijders (2005), access to high prestige or prestigious social capital can enhance outcomes in instrumental actions, be it fundraising, recruiting or political lobbying for a community-based organisation.

As can be seen from Table 5, distribution characteristics based on the results of the position generator suggest that residents in our sample have a broad potential access to high prestige occupations. The results from the resource generator point in the same direction. Nevertheless, our social network analysis also shows that access to prestige related social capital is mostly restricted to the acquaintance networks of respondents. Therefore, underscoring the argumentation of Granovetter (1973), weak ties play a significant role when setting up a community-based organisation. According to Burt (2001), we would further assume that volunteers who are able to bridge structural holes within a municipality can be of immense value for a community-based organisation.

As can be seen from Table 8, civic participation is positively and significantly correlated to different domains of social resources. Furthermore, as for the position generator indicators, volunteer experience is slightly higher correlated to personal support and personal skills social capital than to prestige related social capital. It is also striking that in our sample, measures of civic participation are positively and significantly correlated to low prestige social capital. These findings suggest that in return for volunteering in a community-based organisation residents not only get a more diversified social network. Based on these results, we can also assume that they get potential access to embedded resources that are, according to Lin (1999), especially, considered valuable in expressive actions, such as personal support which positively impacts the individual's life satisfaction.

Finally, our results suggest that cooperatives could actually be a suitable organisation form for community-based partnerships. In early stages, as for any other young and resource-scarce venture, a community-based organisation needs to acquire external and complementary resources (Burt 1992). The flexible and open network structure of cooperatives allows bridges to members of other networks within and outside the community, facilitating necessary resource exchanges. In later stages, however, a closed network structure characterised by

strong ties could be useful to maintain a certain resource base, also enhancing social cohesion (Lin 1999). A community-based organisation in the maturity stage might be of a more expressive nature, providing members and volunteers with social opportunities, thus, enhancing their life satisfaction (Gordon and Babchuk 1959).

## **7 Discussion, Limitations and Conclusion**

In this paper, we have investigated the relationship between community characteristics, social capital and civic engagement in the context of community-based development. Using a position and a resource generator tool, we have measured potential access to different domains of social resources and the strength of ties in social networks of rural communities in Austria. However, neither the position nor the resource generator are able to measure actual utilisation of embedded resources and their effects in instrumental or expressive actions. In fact, our results suggest that potential access to resource-rich positions in communities does not imply an access to domain-specific resources that are related to prestigious occupations. Therefore, generating information on utilisation of embedded resources in small rural communities is an important subject for future studies.

Our results further support the argument of Granovetter (1973) that new and complementary social resources, needed for community-based development, can only be accessed through weak ties within a neighbourhood. Thus, following Burt's argumentation (2001), residents who are able to bridge different networks and thus provide access to prestige and education related social capital in the community are important for the development of community-based organisations. Based on our data, we see that those residents who show a high commitment to community-based development also have ties to prestigious positions and specific domains of resources. Because of the existing structural holes between individuals with complementary resources, volunteers of local development cooperatives have to mobilise social capital that crosses social and political boundaries within a small municipality.

Furthermore, we found evidence that civic participation is positively correlated to various domains of social capital, especially providing access to high prestige positions and thus instrumental resources. However, according to our results, volunteers within their community seem to develop ties to low prestige positions, too. Thus, an important target group for community-based organisations to access critical resources are residents who already have volunteer experience. Therefore, they can act as information brokers (Burt 2001). Again, further research is needed in terms of measuring access to resource-rich positions that are located outside the community.

In addition, our results highlight the importance of considering the community context in order to explain social network composition and potential access to so-

cial resources. These results also raise questions for future studies, in terms of what could be possible returns of social resources accessed by community based cooperatives on the collective level of a municipality. The next stage in our research enterprise will be to include sociodemographic variables in our measurement model and thus, investigate positional effects on the formation of social capital in rural communities in Austria.

The results presented in this paper should also be read with some caution. As far as the connection between civic participation and social network characteristics is concerned, further research is needed to reduce concerns about our assumption on the direction of causality. Secondly, the validity of our results is of limited scope due to a rather small sample size. Nevertheless, our analysis provides valuable insights for policy makers concerned with fostering community engagement through cooperatives.

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## Appendix

Community connectedness	
Very familiar neighbours (%)	48.6
Very friendly neighbours (%)	34.4
Very supportive neighbours (%)	21.6
Very trusting neighbours – direct measurement (%)	16.4
Very trusting neighbours – indirect measurement (%)	35.3
Reciprocity (%)	18.1

**Table 1: The community context (n=196)**

Civic engagement	
Civic participation	
Volunteer experience (%)	67.8
Volunteer experience in the community (%)	43.6
Leadership volunteer experience (%)	35.0
Commitment to community participation	
High commitment to community-based development (%)	30.0
High commitment to community-based partnership (%)	28.4
High commitment to volunteering for the community (%)	16.1
High commitment to leadership in community-based development (%)	12.9

**Table 2: Civic engagement (n=196).**

“Do you know anyone in your community who is a/an...”	Prestige	% yes	Relationship (%)		
			Acquaintance	Friend	Family member
<i>High prestige social capital:</i>					
Lawyer	85	18.7	14.2	4.6	2.0
Doctor	85	68.7	54.4	9.8	3.3
Legislator	70	73.0	47.4	20.4	9.5
Business professional	69	78.9	43.8	31.2	13.5
Teaching professional	69	75.1	40.8	29.9	16.1
<i>Low prestige social capital:</i>					
Shop salesperson	43	85.1	54.5	25.4	11.3
Machinery mechanic	34	71.2	48.3	17.6	10.3
Hairdresser	29	71.4	52.8	14.7	2.8
Cleaner	29	67.1	49.3	14.5	4.3
Labourer in construction	23	70.0	47.1	17.1	11.4
Average	54	67.9	45.3	18.5	8.5

**Table 3: The position generator items and responses (n=196).**

“Do you know anyone in your community who/whom/whose ...”	% yes	Relationship (%)		
		Acquaint- ance	Friend	Family member
<i>Personal support social capital:</i>				
Can help with small jobs around the house?	91.0	43.4	51.8	34.5
Can do your shopping when you are ill?	92.8	27.9	52.5	52.1
Can baby-sit for your children?	81.3	21.7	41.5	50.3
You would give your house keys while you are on holidays?	90.0	19.6	41.1	53.6
Can find a holiday job for a family member?	51.2	31.1	20.5	18.0
<i>Marginalised social capital:</i>				
Is long-time jobless?	25.2	16.6	5.2	4.3
Mother tongue is not German?	47.0	37.4	11.7	4.7
<i>Prestige and education related social capital</i>				
Earns more than EUR 3,000 monthly?	49.5	26.0	20.1	13.1
Has knowledge about juridical matters?	56.2	29.3	18.3	17.8
Is on the local council?	78.9	58.1	21.7	13.4
Has good contacts with politicians beyond the local scale?	63.3	39.4	19.7	11.3
Has knowledge about business matters?	65.4	34.7	26.3	22.1
Has good contacts with newspapers or radio or TV stations?	33.8	21.4	10.0	5.2
<i>Personal skills social capital:</i>				
Can motivate people?	72.9	40.1	37.3	17.5
Is handy repairing household equipment?	91.9	49.5	44.5	42.4
Can work with a personal computer?	83.3	34.7	25.9	45.5
Can write an article for a local newspaper?	64.5	35.5	19.2	22.9

**Table 4: The resource generator items and responses (n=196)**

	Total network				Tie strength		
	Min	Max	Mean	SD	Acquaintance network	Friends network	Family network
					Mean	Mean	Mean
<b>Position generator</b>							
No. of positions accessed	0	10	6.68	2.80	4.47	1.89	0.80
Total accessed prestige	0	536	342.73	145.36	234.15	101.71	39.82
Average accessed prestige	31.67	85	51.84	6.29	52.37	54.40	49.77
Highest accessed prestige	29	85	79.93	8.77	67.44	40.58	27.43
Range in prestige	0	62	52.52	14.85	45.59	24.01	15.82
High prestige social capital	0	5	3.06	1.43	1.95	0.96	0.44
Low prestige social capital	0	5	3.62	1.60	2.53	0.93	0.38
<b>Resource generator</b>							
No. of resources accessed	0	17	11.40	3.77	5.59	4.90	4.39
Prestige and education related social capital	0	6	3.42	1.84	2.06	1.17	0.84
Personal support social capital	0	5	4.12	1.17	1.42	2.15	2.18
Personal skills social capital	0	4	3.11	1.13	1.63	1.30	1.25
Marginalised social capital	0	2	0.72	0.74	0.54	0.16	0.09

**Table 5: Distribution characteristics of social capital measures from position and resource generator (n=196)**

Position generator measures	Resource generator measures			
	Deductive measures	Inductive measures		
	No. of items	Prestige and education	Personal skills	Personal support
Deductive measures				
Highest accessed prestige	.341**	.342**	.219**	.337**
Range in prestige	.510**	.486**	.419**	.354**
Number of positions	.732**	.715**	.572**	.468**
Average prestige	-.181	-.137	-.253**	-.018
Total prestige	.720**	.705**	.551**	.461**
Inductive measures				
High prestige	.671**	.662**	.485**	.445**
Low prestige	.674**	.653**	.559**	.432**

*Pearson correlations: \*\* $p \leq 0.01$*

**Table 6: Correlations between social capital measures from position generator and resource generator (n=196)**

Neighbourhood connectedness	Social capital measures									
	Resource related social capital				Position related social capital					
	No. of resources	Prestige and edu- cation	Personal skills	Personal support	No. of positions	Total prestige	Highest prestige	Range in prestige	High prestige	Low prestige
Neighbourhood familiar- ity	.235**	.212**	.260**	.262**	.258**	.251**	.268**	.243**	.233**	.248**
Neighbourhood friendli- ness	.195*	.178*	.223**	.214**	.267**	.266**	.229**	.264**	.228**	.241**
Neighbourhood support	.182*	.168*	.200**	.227**	.255**	.253**	.261**	.277**	.246**	.234**
Neighbourhood trust (di- rect)	.137	.178*	.124	.301**	.175*	.182*	.213**	.201**	.177*	.148*
Neighbourhood trust (in- direct)	.333**	.170*	.302**	.461**	.431**	.412**	.262**	.304**	.379**	.427**
Reciprocity	.271**	.199**	.129	.258**	.140	.133	.202**	.216**	.110	.118

*Pearson correlations: \*\* $p < 0.01$ , \* $p < 0.05$*

**Table 7: Correlations between community context and social capital (n=196)**

Civic engagement	Social capital measures									
	Resource related social capital				Position related social capital					
	No. of resources	Prestige and education	Personal skills	Personal support	No. of positions	Total prestige	Highest prestige	Range in prestige	High prestige	Low prestige
<i>Civic Participation</i>										
Volunteer experience	.278**	.197**	.239**	.307**	.216**	.224**	.177*	.161*	.257**	.167*
Volunteer experience in the community	.227**	.192**	.218**	.204**	.262**	.260**	.120	.147*	.255**	.242**
Leadership volunteer experience	.274**	.168*	.257**	.235**	.241**	.212**	.058	.117	.154	.265**
<i>Commitment to community participation</i>										
Commitment to community-based development	.284**	.212**	.194**	.266**	.223**	.203**	.005	.121	.165*	.242**
Commitment to community partnership	.209**	.145*	.168*	.240**	.191**	.183*	.149*	.185*	.165*	.187**
Commitment to community volunteering	.365**	.284**	.247**	.343**	.228**	.226**	.119	.165*	.230**	.220**
Commitment to community leadership	.251**	.187*	.224**	.221**	.203**	.196**	.215**	.211**	.174*	.201**

*Pearson correlations: \*\*p<0.01, \*p<0.05*

**Table 8: Correlations between community engagement and social capital (n=196)**