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Social capital as an innovative vector of urban resilience

Executive summary

Recherche et rédaction

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Introduction

In 2016, the City of Montreal joined the 100 resilient cities network and set up a resilience office (now the Office of Ecological Transition and Resilience). Subsequently, in 2018, the City published its *Montreal's Resilient City Strategy* (Ville de Montréal, 2018), setting four major orientations. The first of these orientations states as an ambition to **"take action to support a united and safe community"** (Ville de Montréal, 2018, p. 26). The development of social capital, awareness and commitment of young Montrealers, and the development of emergency preparedness workshops, are some of its objectives.

The Cité-ID Living Lab - Governance of urban resilience (Cité-ID) and the Maison de l'innovation social (MIS) then developed a research project aimed at meeting these objectives, in partnership with the City of Montreal. This project has, as a guideline, to **assess the relevance of the concept of social capital as a vector of urban resilience in different contexts**. It pursues three main objectives:

1. **develop an adapted social capital measurement tool;**
2. **understand the mechanisms for creating social capital and;**
3. **observe the institutionalization mechanisms of the concept of social capital.**

The project was divided into three parts, structured around research sub-projects:

Part 1: "Emergency preparedness and community resilience", in partnership with Transition NDG;

Part 2: "Youth social capital", with the C-Vert program of the YMCAs of Quebec;

Part 3: "Centre-Sud local soup", with the Centre-Sud community development corporation (CDC).

Finally, a transversal analysis and reflection on the institutionalization of the concept of social capital in the three projects was carried out.

Social Capital

Social capital can be defined as **"the networks and resources available to people through their connections to others"** (Aldrich, 2012, p.2). Several empirical studies have shown that high social capital is associated with many **societal and individual benefits**, ranging from **improved resilience of communities and cities to disasters**, to better access to the labor market. The development of the concept of social capital has been achieved, among other things, by the gradual development of **measurement methodologies**, in particular **quantitative methodologies**, but also thanks to **qualitative approaches** in addition to quantitative tools.

Social ties are at the center of this concept and they are generally categorized in three dimensions. The **bonding dimension corresponds to the links connecting individuals from the same group or the same community**. They contribute to the tightening of the social fabric with the aim of constituting a certain homogeneous unit of individuals. **Bridging links connect members of different social groups or communities**. The **linking dimension corresponds to the links and relationships of a given individual with people in positions of authority, power and / or influence** (e.g. a representative of public authorities, an elected official, etc.). Along with the ideas of trust and reciprocity, this categorization is one of the cornerstones of the main measurement tools that have emerged from research on social capital.

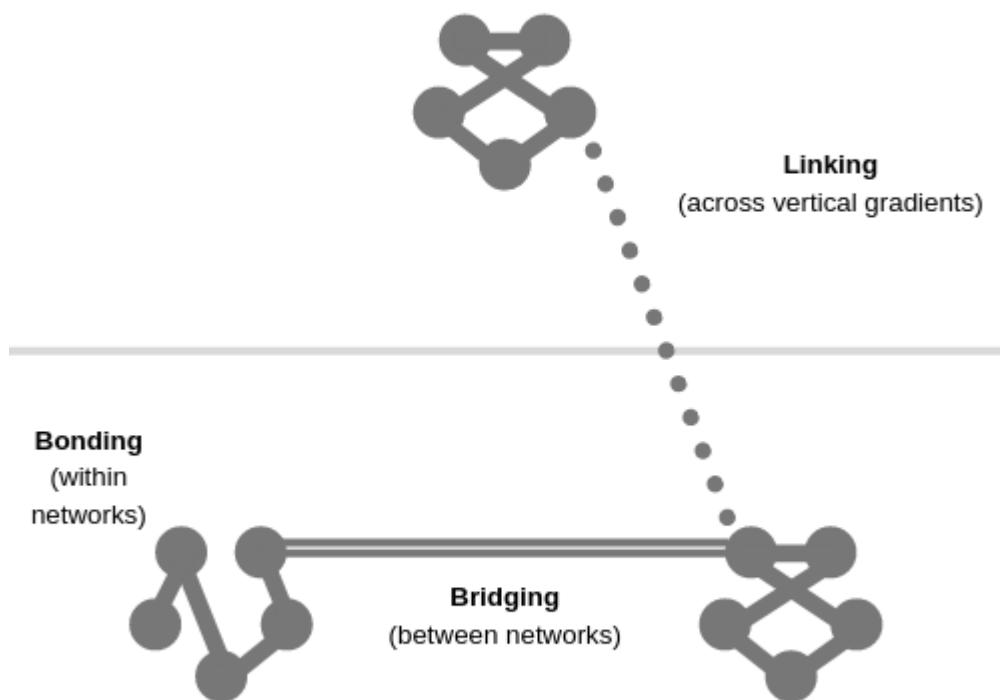


Figure 1.1 - Three types of social links composing social capital

(Adapted from Aldrich, 2012, p.34)

Social capital is also measured based on the categorization between structural links and cognitive links. **Structural links are objective and observable links** (participation within groups, associations or organizations, interaction with new people). **Cognitive links are intangible links** (values, norms and attitudes governing links). There are a large number of **constructs or factors**, which may be relevant to consider when trying to measure social capital: **trust, cohesion and social inclusion, feeling of belonging, etc.**

Part 1 “Emergency preparedness and community resilience”

Context and objectives

This action research project has **several objectives**. First of all, it aims to **support the volunteer members of Transition NDG in the development and realization of emergency preparedness workshops in the Notre-Dame-de-Grâce borough**. At the same time, Cité-ID wishes to **document the actions and assess how they contribute to increasing the level of preparedness and developing social capital**. Also, this research aims to **develop a methodology for measuring social capital** in order, among other things, to draw a quantitative portrait, and **explore the relevance of this framework for the analysis of resilience capacities at the territory scale**. This work is part of orientation 1 "take action to support a united and sage community" of *Montreal's Resilient City Strategy* (Ville de Montréal, 2018, p.28).

Key concepts

The actions deployed in the workshops as well as the measurement revolve around the conceptual frameworks of **individual emergency preparedness** and **social capital**.

Emergency preparedness

The workshops, like the assessment of the level of individual emergency preparedness, were built around two main axes of work and analysis. The first corresponds to the perception and awareness of citizens regarding risks. The second explores concrete emergency planning and preparedness measures.

Social capital

Our framework for the research and analysis has been built around the three dimensions of social capital: bonding, bridging and linking.

Methodology

This research is based on a **mixed, quantitative and qualitative methodology**:

- We developed a **quantitative questionnaire** which we submitted to citizens of the Notre-Dame-de-Grâce (NDG) borough. The questionnaire covers emergency preparedness and the three dimensions of social capital: bonding, bridging and linking.
- Participating in the development and implementation of the workshops, we carried out **participant observation**.
- We also carried out **semi-structured interviews** with the various project stakeholders (Transition NDG leaders,

representative of the City of Montreal).

Results

- In total, **6 workshops were carried out in NDG**, each bringing together between 15 and 20 participants. **About a hundred participants in total attended the workshops.**
- We have developed and documented a **simple, fun, participative and easily reproducible or adaptable workshop formula**. This includes various activities, an icebreaker activity, a participatory quiz, an awareness game on building an emergency kit, and community mapping exercises. These workshops were also an opportunity to create a **space for discussion and exchange between citizens and representatives of the public authorities involved in emergency preparedness.**
- These workshops mainly serve to **inform and educate citizens about the importance of both good individual preparation and the development of social capital in preparation of possible disasters.**
- A **methodology for measuring the level of emergency preparedness and social capital was designed**, tested and distributed to citizens of NDG. It is structured around **6 indicators on the level of emergency preparedness and 11 indicators on social capital.**
- **Social capital constitutes a relevant analytical grid for assessing vulnerabilities and resilience capacities at the community level.** For example, by crossing the various indicators of social capital with independent variables such as the language spoken most often at home, we find that **people who do not speak either of the two official languages have systematically lower scores in the bonding dimension.** Thus, this suggests the existence of a potential phenomenon of exclusion of this group.
- Our observations enabled us to draw various conclusions. First, we were able to note a real motivation and some proactivity from the participating citizens in regard to their preparation process. Citizens communicated their expectations, they came in particular to learn about best practices for preparing individually and collectively. The workshops were built to meet this objective. However, our observations do not make it possible to know about the actual and concrete action of the participants, and the implementation of actions to prepare and develop links within their community.
- We were also able to highlight the complex issue of communication and the relationship between citizens and public authorities in regard to emergency preparedness.

Conclusion

Transition NDG's emergency preparedness workshops help inform and educate NDG citizens on different facets of

emergency preparedness and social capital. Through the various activities developed, citizens are informed about the risks, the emergency measures to take and the resources in their neighborhood. The formula and the content designed have been documented with the ambition that they be scaled up, adapted or reproduced in other communities and boroughs.

Part 2 “youth social capital”

Conceptual framework and objectives

The objective of this research is to study **the creation of social capital among young people aged of 13 to 17 and participating in the C-Vert program**, an environmental youth program of the YMCAs of Quebec in **five boroughs of Montreal**. This research aimed to study how the C-Vert program contributes to achieving some objectives formulated by the City of Montreal in its strategy.

To do this, we **developed a measurement tool and documented the creation of social capital** among participants in the C-Vert youth program according to three dimensions:

1. The **bonding dimension** of social capital, the creation of links between young people in the same group, and the strengthening of links between participants and their community.
2. The **bridging dimension** of social capital, the creation of links between youth participating in the C-Vert program and members of other communities outside their close circle.
3. The **linking dimension** of social capital, the creation of links between young people from the C-Vert program and organizations in the neighborhood, as well as with public authorities (elected officials, etc.).

Beyond these three types of links, our research also studied the links that were created between participants from different neighborhoods as well as the **mobility of youth participating in the program within the City of Montreal**. We also paid particular attention to the **actions carried out by participants in their neighborhoods** and with organizations.

Methodology

This research is based on a mixed, quantitative and qualitative methodology:

1. We developed a **quantitative questionnaire** which we had the participants fill out at the start and end of the program. The questionnaire covers five constructs of social capital (trust and security, informal socialization, diversity of friendships, involvement and leadership) relating to the elements of bonding, bridging and linking.
2. We carried out **participant observation** during some program activities.
3. We organized **focus groups** with "C-Vert +" (former young "C-Vert" continuing to get involved in the program) in three boroughs in order to better understand some mechanisms for creating social capital.

The first analyzes of questionnaire and observations show that **the creation of social capital goes beyond what is measured by quantitative questions**. This is why we recommend keeping a mixed approach (quantitative and qualitative) in order to better reflect the effects of the program on the creation of social capital.

Results

On the basis of the observations, focus groups and results of the questionnaire (analysis of the differences between the responses at the start and at the end of the program), our analysis show that the **C-Vert program leads to the strengthening of bridging social capital by diversifying the network of friends of participants. It also develop linking type of relations by allowing young people to intensify their involvement in their community and to develop new civic skills. Finally, it contributes to the development of bonding type relations by stimulating new conversations on the subject of the environment between C-Vert participants, their family and their friends.** In more detail, our analysis demonstrate the following conclusions:

- **The C-Vert program allows young people to broaden their spatial horizons by discovering new neighborhoods of Montreal.** This translates in several ways. For example, the C-Vert program enable participants to carry out activities or visits in other neighborhoods. **The program also helps promote their mobility** by providing them with a bicycle, teaching them how to ride and repair them, but also by giving young people a habit of getting around. **C-Vert participants have more friends in other neighborhoods at the end of the program.** This is an element of bridging social capital that we also observe, participants meeting the "C-Vert" of other neighborhoods on several occasions, and developing friendships with young people from other groups. This also translates into new behaviors as young people visit or participate in activities in other neighborhoods more often.
- Respondents to our questionnaire have, before the C-Vert program, a very diverse circle of friends. With respect to the diversity of social relationships, the biggest change observed concerns the increase in the proportion of participants having friends of another sexual orientation
- We are seeing a "tightening" and intensification of the involvement and leadership of young people, rather than an increase in their involvement. Between the start and the end of the program, **fewer young people have no or very little involvement in their community**, and fewer young people are involved in many activities (7 and more). In addition to these short-term quantitative results, our observations and the focus groups reveal that **the young people who participated in the program and who decide to continue with C-Vert + will get involved and show leadership.** Through C-Vert, young people are more empowered and are active in implementing actions during a four-week group internship. The focus groups with the "C-Vert +" participants show that they continue to be involved both in the program and in other initiatives, for example in green committees in their schools. **Participants consider the program acts as a springboard and empower them to better achieve their goals and succeed in their actions.**
- There is a strengthening of bonding-type links between young people within groups. In addition, young people

are proud to participate in this program and **spread the word to their families and friends** by talking to them about what they are doing and what they are learning. **The main theme of the program, the environment, becomes a driver of participant's discussions with their friends and family.** Young people thus seem to become a channel for dissemination and the program can have repercussions in their community and reach beyond the participants, which is beneficial for achieving collective objectives in terms of resilience development.

- When at C-Vert, young people **carry out actions which, in themselves, will generate social capital.** The program thus creates social capital not only among young people, but indirectly throughout the community.
- The program **develops linking type of links by creating direct links between young people and neighborhood organizations.** In some cases, these links are maintained over a long period of time and intensify when young people carry out environmental actions at the end of the program.
- The program also allows young people to develop their civic skills (linking). They participate in **climate protests**, develop strategies **for writing to provincial and federal elected officials**, and **invite municipal and provincial elected officials to the inauguration of activities carried out during their internship.** In the case of "C-Vert +" participants, they also **participated in the consultations of the Office de consultation publique de Montréal** by presenting "memoirs". In this sense, the C-Vert program becomes a learning opportunity for civic engagement.

Conclusion

We can see that the C-Vert program contributes in different ways to the creation of social capital:

- Young participants have a better knowledge of their neighborhood, they develop their spatial mobility and create links with young people of their generation throughout the city.
- The program also enable the creation of new links between young people and organizations in their neighborhood. This allows them to both plan and carry out actions, but also to acquire skills and resources that they can use once the program is over. This "attachment" to organizations in their neighborhood is important for "activating" young people and getting them involved in their neighborhood.
- The program allows young people to become citizens engaged in their community. They also acquire new skills and knowledge on civic engagement.

- This program values young people within their families, their group of friends and their community on the basis of their new knowledge and skills on environmental issues.

The C-Vert program consists of a fabric of activities which, as a whole, contribute to strengthening the social capital of young people in the three dimensions of bonding, bridging, and linking. This program seems to benefit the participants, but also their neighborhood by the actions they carry out or the influence they can have within their community. The participation of young people in a city-wide environmental engagement program contributes to the development of their social capital and their awareness of climate change. Consequently, this program makes it possible to develop fundamental elements to achieve the community resilience development objectives as formulated by the City of Montreal.

Part 3 “ Soupe Locale Centre-Sud ”

Objective, conceptual framework and hypotheses

L'objectif de cette recherche-action était d'évaluer l'impact de l'activité de participation citoyenne Soupe Locale Centre-Sud en matière de capital social. Ainsi, nous nous sommes intéressés aux transformations générées sur les liens sociaux et aux différentes ressources et bénéfices qui émanent de cette activité.

The objective of this action research was to **assess the impact of the citizen participation activity “Soupe Locale Centre-Sud” in terms of social capital**. Thus, we investigated the transformations on social ties and in the various resources and benefits that emanate from this activity.

More specifically, we approached activity and measurement with four main hypotheses:

Plus spécifiquement, nous avons abordé l'activité et la mesure avec **quatre grandes hypothèses**:

1. The Centre-Sud Local Soup activity contributes to the development of **strong ties between close individuals, belonging to the same network and to the same community**. It has an impact on **bonding** links;
2. It enables the **creation of new links between individuals belonging to different networks and social groups**. It is thus **a place where people from diverse population groups meet**. It therefore has an impact on **bridging** links.
3. As a participatory democracy exercise, Centre-Sud Local Soup **transforms the relation participants have with democracy, politics, and enable the creation of links with influential institutions and public authorities**. It therefore has an impact on so-called vertical links.
4. L'activité Soupe Locale agit au niveau individuel sur le **sentiment des participant.e.s de pouvoir avoir une influence et un impact sur leur environnement (physique, social, économique, politique)**, elle développe ainsi le **sentiment d'efficacité personnelle**.
5. The Local Soup activity acts at the individual level on the **feeling participants have to be able to influence and have an impact on their environment (physical, social, economic, political)**, it thus **develops the feeling of self-efficacy**.

Finally, all of these hypotheses and dimensions are analyzed according to **two approaches to social capital: structural and cognitive**. The structural approach refers to the existence and volume of links, the configuration and the structure of social networks. The cognitive approach, on the other hand, refers to the nature and quality of the social relations.

Methodology

This study was carried out using a **mixed, quantitative and qualitative research method**. Different indicators were developed from the responses of 41 participants to a questionnaire which aimed to assess the creation of links and better understand the impact of the activity. In parallel, the research team attended 4 Centre-Sud Local Soup events, with the objective of observing interactions (discussions, exchanges, etc.). Finally, quantitative and qualitative data, collected by the Centre-Sud CDC, were also analyzed.

Results

Participant with diverse profiles

The **activity manages to bring together different population groups**. The **profile of the respondents is diverse in terms of age, income level, place of birth and place of residence**. Centre-Sud Local Soup also manages to mobilize citizens outside its territory, around half of the respondents to the questionnaire live outside the neighborhood. Women and those with a higher level of education are strongly represented in the sample.

Bridging place with networking generating collaborations

Because of this diversity, **Locale Soup is above all a place where participants meet new people. Half responders say they spoke with 4 or more new people during the event.**

The relationships created continue outside the walls of Local Soup, after the event. Reasons for these relations are: **collaboration, mutual assistance, or the exchange of contacts or information**. In fact, **66% of individuals who responded to the survey said that they had been in contact following the event, with at least one of the people they met**. For project leaders, in particular, these new links allow access to different resources. The Centre-Sud CDC also plays a crucial role of facilitator and matchmaker, in particular by referring the latter to the people and resources they need.

Project leaders as interfaces and window on Centre-Sud borough

Local Soup seems to act as an **interface between different social groups and as a window for the diversities and realities of the neighborhood**. The project leaders, through their project and their personal history (characteristics, history, identity, experience), constitute **windows on the realities, the diversities and the problems present within Centre-Sud borough**. In this sense, Local Soup acts on social capital from a cognitive point of view by making participants aware of realities with which they are not necessarily familiar. Eighty-eight percent of respondents say they agree or strongly agree with the statement that the activity allowed them to "discover different realities".

Increase in the knowledge of the neighborhood and sense of belonging

Local Soup **allows participants to get to know the Centre-Sud borough better**. The activity thus **contributes to the development of a certain sense of belonging, and can foster the development of a spirit of community**. However, Centre-Sud Local Soup has a **lesser impact on bonding links due in particular to the low frequency, low intensity and short duration of the activity**. These links are also more difficult to measure. We were unable to observe the creation or

development of strong ties within particular groups.

Interest in civic participation, but low impact on confidence in politics

Centre-Sud Local Soup arouses the interest of participants in civic participation activities. In fact, **83% of them declare that the activity made them want to engage in civic participation activities**. However, the activity contributes less to the development of a feeling of trust towards politics and democracy. As a participatory democracy activity at the local level, it is not surprising that the respondents consider that the activity has little influence on their perceptions regarding aspects associated with the traditional model of representative politics (democracy and politics).

Stimulate a feeling of self-efficacy

Centre-Sud Local Soup **influence positively the feeling of self-efficacy and stimulates the desire to undertake something**. Respondents believe that Centre-Sud Local Soup has reinforced the feeling that they can have an impact on their community. This observation is even greater amongst project leaders, for whom Centre-Sud Local Soup constitutes a real test and a launching pad for their project. Thus, they feel valued. Presenting their project as part of the activity allows them to boost their confidence and improve their initiative.

Highlights

- In line with the objectives of the Center-Sud CDC, **Centre-Sud Local Soup manages to develop bridging links**, between people who did not know each other before and people belonging to different social groups. **These links generate new resources for both the citizen participating in the activity and project leaders**. Considering that bridging links are crucial from the perspective of the fight against poverty and social exclusion, **Centre-Sud Local Soup, within a territory confronted with this type of problem, constitutes a resolutely relevant intervention**.
- Social capital literature, however, emphasizes that bridging links do not systematically allow individuals to access resources. Indeed, the quality of the links (cognitive aspect of social capital: trust, reciprocity, etc.) is a determining factor for the activation of resources. Our study showed that the conversion of links into resources took place in the case of **Centre-Sud Local Soup**. To get a better understanding of this phenomenon, **future research efforts could focus on a more in-depth analysis of the complex relationship between resource links and medium-term benefits**, in particular through qualitative methods.
- **Center-Sud Local Soup also increase the feeling of self-efficacy** of both the project leaders and citizen participating in the activity. This notion is circularly associated with social ties. Future work could also seek to clarify the relationship between this notion and social capital.
- **Soupe Locale Center-Sud also has an effect on bonding links**, to a lesser extent, however. This result is consistent with the literature. Indeed, it is more difficult and time consuming to develop this type of link.
- The concept of social capital is relevant for an organization in the community such as the Centre-Sud CDC. A more

detailed and larger analysis would demonstrate, in particular to public and private granting agencies, how and why to develop social ties within a district or community.

- Action research can therefore help understand this complex dynamic between links-resources-benefits. The *living lab* research approach bringing together the public-private-citizen trio should make it possible to tackle these phenomena in all their complexity, and allow collective awareness and learning about this development approach focused on the link.

Institutionalization of social capital

Objectives and conceptual framework

The objective of this part of the research was to better **understand how the three action research projects have transformed organizations and their environment**, as well as to **analyze how these three projects can serve as a launching pad to allow the City of Montreal to "Foster the development of social capital among Montrealers in order to strengthen community resilience"** (Ville de Montréal, 2018, p. 32) as planned in its resilience strategy. We discuss **the lessons to be learned from the three action research projects** carried out and we present an analysis of the **institutionalization processes of the concept of social capital** developed by the organizations during the project.

We use an analytical framework linking scaling and the transformation of institutions. We distinguish **three types of potential transformation: deep organizational transformation** (transformation of values, tools or objectives), **horizontal transformation** (adoption of innovation by other organizations or other services of the organization), and **political transformation** (inclusion of innovation in public policies, dissemination and systemic transformation).

Methodology

This analysis is based on the various data collected in the context of the three action research projects. To better understand how the three action research projects have transformed organizations and their environment, we carried out a comparative analysis by focusing on the centrality of the concept of social capital for organizations, the type of organization, the markers of appropriation of the concept, the interests of organizations for social capital, the type of social capital generated by the project and finally the type of transformation generated by each project.

Results, discussion and recommendations

We see that social capital has been **translated into vocabulary and has been used in the operational thinking of the three organizations**. The concept is considered **useful to illustrate the intangible results of actions**, but from different angles depending on the interests of the different organizations. Thus, the three projects led to internal transformations. As for the horizontal transformations, they were possible insofar as the organization disseminated the research results and the usefulness of the concept to other departments and other organizations. The following table shows the differences in the appropriation of social capital by the three organizations that took part in the research project.

Synthèse des résultats

	Transition NDG	YMCA	CDC Centre-Sud
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Centrality of the concept within the mission of the organization	Strong	Strong	Strong
Type of organization	Citizen association	Grouping of community organizations (11 YMCAs)	Grouping of community organizations
Markers of appropriation	Understanding and interpretation Use in discussions and oral exchanges	Understanding and interpretation Use in discussions and oral/written exchanges Internal dissemination External dissemination	Understanding and interpretation Use in discussions and oral/written exchanges Internal dissemination External dissemination
Interest (s) of the organization in the concept	Legitimize the actions undertaken	Strategic Continuous improvement Communication	Strategic Accountability Impact assessment Continuous improvement Communication
Type of social capital created	Bonding	Bonding, Bridging et Linking	Bonding, Bridging et Linking
Type of transformation	Internal transformation	Internal transformation Horizontal transformation	Internal transformation Horizontal transformation

If the social link is at the heart of the action of the three projects, the organizational capacities of the actors (e.g. resources, time) and the level of maturity of the projects studied (start-up phase versus financial difficulties after several years) explain the contrasts between these. **Capacities of organizations and their individual context must be taken into account** to understand the differences, particularly in terms of institutionalization process. Capacities and context must also be **taken into account by the municipal actors if they wish to animate and lean on a network of local actors and associations of citizens to implement public policies of resilience**. Thus, the development of organizational capacities is an important factor in the scaling of projects and the type of transformation observed.

At the territorial level, the development of social capital is a central objective within the three projects. **Organizations act as intermediaries between residents and territories to transform the living environment**. Their role as catalyst and facilitator (Wilson, 1997) allows participants to **give a meaning to their territory and to start undertaking actions**. The projects also contribute to **strengthening interorganizational relationships** and are therefore resolutely relevant to public authorities, as innovative solutions to meet the objectives set out in the resilience strategy (Ville de Montréal, 2018). **The authorities would benefit from formally positioning themselves to support these projects and thus increase**

their influence in other boroughs, influence new policies and support a deep transformation across the different neighbourhoods of the city.

Through these three projects, **the municipal administration was able to observe the impact of various community projects on social capital**, and assess the relevance of this concept as a tool for transformation. This step can be understood as the premises of an adaptive governance process, where the city administration builds an understanding of the interaction between actors, the potential strategies implemented and the influence of the context. To fully implement the objectives of its social capital resilience strategy, **the City would benefit from affirming its strategic position as an active mobilizer of communities and intermediary organizations** (Evans, 1995; Varda, 2011). The City has demonstrated its openness to increase its links with partners and its support would benefit from formalizing and perpetuating, considering that the implementation of strategies must generally be supported over several years.

Finally, the support of other community organizations, mainly through intangible resources (e.g. coordination, access to other organizations, sharing of information, networks to stimulate participation) facilitates the scaling up of projects. **“Boundary organizations”**, such as the Maison de l’innovation sociale, **have the potential to influence self-organization dynamics where a set of organizations plays an active and mobilizing role in implementing the policies adopted by the authorities municipal** (Teisman and Klijn, 2008).

Conclusion

Cité-ID Living Lab and the Maison de l'Innovation Sociale have developed an action research project with the ambition of meeting different objectives of *Montreal's Resilient City Strategy* (Ville de Montréal, 2018). This project aimed, among other things, to develop tools for measuring social capital, to study and explore the mechanisms for its creation in different contexts and to study how this notion could be institutionalized. This study was carried out in three different contexts divided in three parts.

The first part was an opportunity to support **Transition NDG** in the **development and implementation of emergency preparedness and community resilience workshops**. In the second part, we **studied the creation of social capital among young people participating in C-Vert an environmental program of the YMCAs of Quebec**. Finally, with the third part, we assessed the **impact of the Centre-Sud Local Soup, a citizen participation activity** organized by **CDC Centre-Sud**, using the concept of social capital. For each of the three parts, a measurement tool and methodology have been designed. This allowed us to build a [guide for organizations](#) willing to measure social capital as well as a repertoire of questions on social capital available on the [Cité-ID website](#) in the "resources" section.

This project demonstrates that existing initiatives and programs on the territory of the City of Montreal contribute to "support a united and safe community", as stated in *Montreal's resilient city strategy* (City of Montreal, 2018, p. 26). However, these initiatives and programs are at a group or borough level and therefore have limited impacts. These programs could be supported by the City, and for example be adapted or replicated in other neighborhoods, in order to widen the number of participants, and ensure their sustainability.

Our observations and our transversal analysis of mechanisms of institutionalization and scaling of the concept of social capital, lay the premises of this reflection. They give the City some baselines and keys, so that it can seize the opportunity to bring actors together, and work to achieve its objectives of urban resilience, one of the new and complex challenges that our society must address.

Bibliographic references

Aldrich, D. P. (2012). *Building resilience: Social capital in post-disaster recovery*. University of Chicago Press.

Evans, P. (1996). Government action, social capital and development: Reviewing the evidence on synergy. *World Development*, 24(6), 1119-1132. doi:[https://doi.org/10.1016/0305-750X\(96\)00021-6](https://doi.org/10.1016/0305-750X(96)00021-6)

Teisman, G. R., et Klijn, E. H. (2008). Complexity theory and public management: An introduction. *Public Management Review*, 10(3), 287-297.

Varda, D. M. (2011). A network perspective on state-society synergy to increase community-level social capital. *Nonprofit and voluntary sector quarterly*, 40(5), 896-923.

Ville de Montréal. (2018). Stratégie montréalaise pour une ville résiliente. Repéré à <https://resilient.montreal.ca/assets/doc/strategie-montreal-ville-resiliente-fr.pdf>

Wilson, P. A. (1997). Building social capital: A learning agenda for the twenty-first century. *Urban studies*, 34(5-6), 745-760.



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