

Innovation Community Network: Evidences of Brazilian Participants' Experience

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Resumo

In 2015, the Jatobás Institute, a civil society organization, launched, through an edict, the call for the Social Innovation Community Network program, which aimed to support and encourage people seeking to solve social and environmental problems. A total of 211 groups registered and 66 were classified. In March 2020 there were 22 active groups that were the object of analysis of this research, which had as objective to raise and analyze the opinions and perceptions of the participants of the program. Twenty-two interviews were conducted with the leaders of these groups and Content Analysis was used to analyse the results. To do so, we used the IRAMUTEQ tool to analyze the data. The results indicate that the experience of participating of the program and the relationships in networks result, both for people and for social groups, in the intensification and strengthening of their empowerment, which allowed us to make important reflections.

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Abstract: In 2015, the Jatobás Institute, a civil society organization, launched, through an edict, the call for the Social Innovation Community Network program, which aimed to support and encourage people seeking to solve social and environmental problems. A total of 211 groups registered and 66 were classified. In March 2020 there were 22 active groups that were the object of analysis of this research, which had as objective to raise and analyze the opinions and perceptions of the participants of the program. Twenty-two interviews were conducted with the leaders of these groups and Content Analysis was used to analyse the results. To do so, we used the IRAMUTEQ tool to analyze the data. The results indicate that the experience of participating of the program and the relationships in networks result, both for people and for social groups, in the intensification and strengthening of their empowerment, which allowed us to make important reflections.

Keywords: Social innovation; alliance networks, competences.

INTRODUCTION

In 2015, it was launched the Social Innovation Community Network initiative, which aimed to support and encourage groups of people who felt powerless to the reality and wanted to solve, through social innovation, social and environmental problems. The Network was born with the belief that networked structures are capable of fostering communities and promoting co-creation among people of various trajectories, who, by triggering collective intelligence, generate positive impact solutions. Based on these principles, the program was structured and began to act on three main fronts:

1. Support to groups through the development of cognitive and behavioral skills and the provision of resources to fund the group's activities and enable the project;
2. Network animation to stimulate collaboration, articulating and facilitating access and connection with partners;
3. Knowledge sharing, producing meetings and systematizing thoughts and practices about social innovation.

In this sense, this research was carried out with the objective of raising and analyzing the opinions and perceptions of the participants of the Community Innovation Network, an initiative of the Jatobás Institute, about the benefits arising from this participation, as well as about suggestions for improving the practices adopted.

Created in 2005, the Jatobás Institute (IJ) is a Civil Society Organization that has as its mission "to positively influence the expansion of consciousness and action, in the construction of a collective, solidary and sustainable path".

A total of 211 groups were enrolled and 66 of them were classified. 36 of them were classified to participate in the Activity Day. Initiatives focused on social entrepreneurship were selected, which did not necessarily need to be formal organizations, and may present various formats such as collectives and formal associations with different levels of institutional maturity. In March 2020, there were 22 active groups that were the object of analysis of this study.

With the results of this study, we want to know better what are the factors that affect the formation and functioning of social network, what possibilities are that they generate social innovation; whether participation in networks increases the knowledge absorption capacity of participants; and whether it is possible to identify the individual and collective perception of the value of the network for social innovation.

We expect that the reflection provided by the systematized knowledge coming from the experience of these people and participating groups can contribute to the Jatobás Institute to improve its initiatives to promote community networks focused on social innovation and share this experience with other organizations of socio-environmental action.

THEORETICAL BACKGROUND

Social Innovation - The study on social innovations has aroused much interest from both the academic community and managers of private and public companies. Social innovation comes from the need to seek solutions to emerging social, environmental and demographic problems that are not solved by traditional innovation offered by an economic perspective (Szegedi et al., 2016). In this sense, social innovations are new solutions (products, services, models, markets, processes, etc.) that simultaneously meet a social need (more effectively than existing solutions) and lead to new improved capabilities and relationships adding better use of assets and resources. In other words, social innovations are good for society and increase society's ability to act (Caulier-Grice et al., 2012).

Authors such as Tardif and Harrisson (2005) consider social innovations as a way to achieve the well-being of individuals and/or communities.

Although many authors define the concept of social innovation only by adding social issues to the definition of traditional innovation, Fontan et al. (2010) emphasizes that instead of seeking how innovation works, it is necessary to understand how new practices induced by innovation can be converted to make the community able to innovate.

In the same sense, Phills et al. (2008) consider that social innovations are actions that address issues in society with greater effectiveness, efficiency and sustainability than pre-existing approaches on these issues, and from which the creation of value that benefits social actors over private agents occurs.

Social innovators seek to create social changes that are fundamental to addressing the causes of the issues they are dealing with. Fundamentally, Dees et al. (1998) emphasize that the most important factor to define social entrepreneurs and social innovators is the adoption of a social mission to create sustainable social value, that is, a value for society that identifies problems, needs and solutions. In this sense, Anderson, Curtis and Wittig (2014) suggest four criteria that must be met to be considered social innovation:

Social innovation must: be new; aim for a social challenge; have the purpose of creating justice and empowerment, and have the ultimate effect or result: equality, justice and empowerment.

The study of social innovation has been highlighted in several existing disciplines, from sociology to psychology, from regional studies to economics. However, the pragmatic approach suggests that it should be understood as more than a topic for these disciplines. It should be understood as a praxis, a body of knowledge closely linked to practice (Menand, 1997), many times by alliance networks.

Alliances Network - Many social innovation initiatives, according to Cipolla and Afonso (2018), depend on the use of information and communication technology - ICT. These technologies are useful to create new communicative patterns in the city and promote new connections between slums and external areas. As a result, not all of them spread in the form of networks, and when they do it, it happens on a small scale, for example, connecting different initiatives in the same city. In addition, international networks have influenced the emergence of social innovations in Brazil.

Alliances are recognized as a form of common inter-organizational relationship (Van de Vrande et al. 2011). This organizational form has been studied not only taking into account reasons related to market power, risk sharing and cost reduction; but to attributes related to complementarities and interdependence between companies (Nohria and Garcia-Pont 1991). These attributes make companies improve capabilities, resources and skills through the transfer, sharing and acquisition of knowledge (Grant and Baden-Fuller 2004). This phenomenon is found in the literature in terms of how firms acquire knowledge in alliances to achieve high performance in innovation. As a result, alliances are used as a mechanism to create new technological knowledge or to innovate through trust in network management (Van de Vrande et al., 2011).

Klein et al. (2020), in their study, pointed out that trust in network management and information exchange is positively associated with organizational learning. In turn, organizational learning seems to positively impact the performance of network members. Arguably, no results on the impact of proximity among members, trust between members, and commitment among members are interesting to activate a discussion about the role of the region's cultural dimensions in straining the impact of social characteristics underlying inter-organizational networks on organizational learning.

Competence - The competence of the individual is not a state, it is not reduced to a specific knowledge or know-how. Le Boterf (1995) situates competence at a crossroads, with three axes formed by the person (his biography, socialization), by his educational training and by his professional experience. Competence is the set of social and communicational learnings nurtured upstream by learning and training and downstream through the evaluation system. According to this author: competence is a responsible to-know and that is recognized by others. It implies knowing how to mobilize, integrate and transfer knowledge, resources and skills, in a specific professional context.

The notion of competence, according to Fleury and Fleury (2001) comes associated with verbs such as: knowing how to act, mobilizing resources, integrating multiple and complex knowledge, knowing how to learn, knowing how to engage, assuming responsibilities, and having a strategic vision. On the organization side, competencies should add economic value to the organization and social value to the individual. In this sense, the authors define competence as: a responsible and recognized know-how, which implies mobilizing, integrating, transferring knowledge, resources and skills, which add economic value to the organization and social value to the individual.

The concept of competence, for some authors, is tied to the concept of self-efficacy that is understood as "the conviction that one can successfully perform the behavior necessary to produce the results" (Bandura, 1977, p. 193), and competence refers to specific efficacy for a work role (Spreitzer, 1995). According to Bandura (1977), people are motivated to achieve certain behavioral outcomes and are likely to engage in relevant behavioral environments and act accordingly if they feel able.

METHODOLOGICAL PROCEDURES

In the first stage of the research, we collected and analysed secondary data that allowed us understand the proposition of the Jatobás Institute and the characteristics of the participating groups. Through the internal documents of the Institute, we sought to outline the descriptive profile of the 22 participating groups that were invited to participate in the research.

In the second stage, from the theoretical framework on networks and social innovation, it was possible to elaborate the research problem and the objectives that guided the survey and analysis of primary data, obtained from the respondents identified by having led the participating groups/collectives/enterprises in the Innovation Community Network.

At this stage of the research, we carried out the following activities:

A) Delimitation of the Research Problem that has been summarised in the following terms:

-To verify whether the participation of the group (collective, association, OSC, social enterprise) in the activities proposed by the Initiative of the Jatobás Institute contributed to the formation of community networks of social innovation and what was the perception of the participants about the value absorbed by their groups.

B) Definition of the Objectives of the Survey and Analysis of data obtained from the Participating Groups:

-To verify whether and how the participating groups (collectives, associations, CSOs, social enterprises) constituted a network and/or constituted community networks, from the stimulus received from the Jatobás Institute.

-To verify whether the participating groups implemented the original project/idea with which they registered in the notices, or if it underwent improvements/modifications from participation in the Institute's initiative.

-To identify whether participation in the Jatobás Institute initiative caused changes/improvements in organizational and institutional aspects of the participating groups.

The field - Twenty-two interviews were conducted with the leaders of the participating groups who accepted the invitation to collaborate with the research, each about 60 minutes long, through virtual means using the Zoom platform. After the fieldwork, the material collected in the transcriptions and videos of the interviews was integrated with the secondary data obtained preliminary and submitted to the procedures of interpretation and content analysis (Bardin, 1977) by the group of researchers. We tried to identify the similarities and differences of facts narrated and analyze the content of opinions, perceptions and representations expressed by the interviewees, in the light of the analytical categories.

To identify the perception of value about participation in the Social Innovation Community Network, the auxiliary tool called IRAMUTEQ was used. IRAMUTEQ is a free and open source software developed by Pierre Ratinaud and licensed by GNU GPL (v2), which allows statistical analysis on 'textual corpus' and tables consisting of individuals/words (Brígido & Justo, 2013).

EVIDENCES OF THE FIELD

Motivation to participate in the Network - Most of the groups surveyed were attracted by the Jatobás Institute's initiative in search of financial support to make their original idea/project viable. Some are more structured formal organizations, which have in the search for edicts that offer resources, a daily and routine activity of capture that sustains its operation; others are collectives and informal associations that seek to gain experience in responding to such stimuli, learning to formalize their projects and starting the relationship with potential funders.

"There is always a reason not very noble: we need recourse... we needed resources to make this impact project feasible.... that's what we live for, that's our goal" (Gaia).

However, all respondents report that by mixing this offer of financial resources with training and mentoring activities, the proposal of the Jatobás Institute presented a positive differential that was significant, either for the improvement of the original idea or to modify it substantially.

"Actually, it was a super positive side effect.... we had no idea how legal the process would be with Jatobás; we were very positively surprised" (Gaia).

"At Instituto Jatobás it was the first time we participated in a program that had a more extensive mentoring and training" (SPLab/Agrogyn).

"The edict allowed us to go a little further. We've managed to reach other places. We were able to look at the collective in order to propose other actions, in addition to what we already did" (Mulheres Urbanas).

Some participating groups already had the experience of seeking support by participating in edicts such as Gaia, IPA Brasil, Limpa Brasil, Agência Solano Trindade, which are formal, structured organizations that by the time of operation already have a certain institutional maturity.

"The very process of signing up would already be a learning exercise for us. For us to talk about the project, giving more consistency in our speech ended up being fundamental, because the Desacelera needed a 'little hand' to happen. We had a lot going on, but because it was made up of few people we had little focus" (Desacelera).

"We signed up to gain experience... we needed to learn how to write a project to respond to the edicts" (Encrespados).

It was possible to identify cases in which the participation in the Initiative caused a sharp change in the reasons that had encouraged the groups to apply for the edicts. ArqCoop+ identified that the scope of its project was excessively broad and redefined its mission; The Cendira Studio

can better know the needs of women who participated in the collective by resizing their performance; The Teatro de Container totally reviewed its proposal that was aimed at offering theatrical shows to children and began to use the physical space of the square and its containers to serve the population of homeless people who live in its surroundings. It is also noteworthy the case of the Gaia group that discontinued the original project, due to the lack of flexibility of the methodology, but took advantage of the knowledge acquired in the formations of the Initiative to implement a content production action for teachers to deal with the socio-emotional problems of children, in line with the initial intention of their project. As well as the case of SPLab/Agrogyn that identified in the association of its proposal to create community gardens with the availability of equipment for physical conditioning activities, a way to encourage people to take care of personal health, healthy eating and community action.

These more or less drastic cases of alteration of the original project, or even of the initial situation that motivated the participating group to be part of the Innovation Community Network, raise some points of reflection:

- 1) Network participation provides, as Cipolla and Afonso (2018) emphasize, the dissemination of knowledge and information that encourage participants to improve their projects and actions.
- 2) This result was not homogeneous for all those surveyed due to the heterogeneity of composition of the groups participating in the Initiative. The Network comprised formal organisations structured in the form of CSOs and companies, but others participated in the notices although they had no active CRN Corporate Register Number or legal constitution documentation.
- 3) This flexibility in the selection of those enrolled in the notices was positively emphasized, mainly by the informal and unstructured participating groups, such as Wilifa, Encrespados, O Que Você Quer Ser, who would not have the opportunity to participate in processes that were more demanding regarding the presentation of legal documents of organization. On the other hand, it was criticized by organizations such as Clima Mobilidade, Diversifix, IPA Brasil, and Gaia, whose respondents indicated that there was some difficulty in establishing an identity relationship with other participating groups, whose insertion in the territory and type of purpose did not resemble their own.
- 4) This heterogeneity was positive for the constitution of the Network, to the extent that it met the criteria of the initiative's selection process, in order to privilege people/groups with sensitivity to identify social problems and propose solutions through innovative actions. Thus, a wide and diverse range of diagnosed social issues and proposals were obtained to solve or minimize them. This result reinforces the thesis that networks stimulate cooperation and that collaborative work generates creative innovations (Comini, 2016).
- 5) However, in another reading, the heterogeneity of the composition of the Network brought some management difficulties, mainly regarding the alignment of expectations, the monitoring of the implementation of the proposed actions/projects and the evaluation of the results and/or possible desired impacts.

Group Performance - Analyzing the answers, four actions/projects that were discontinued can be tabulated: Diversifix, because it did not reach the target audience initially focused; Climate Mobility, due to social and political restrictions to obtain resources. The groups Encrespados (Curled), É Bom de Ver a Cidade (It is good to see the city) and Feminismo Comunitário (Feminism Community) modified the original action/project due to the difficulty of access to the target populations, but also due to insights provoked by training events and access to new knowledge, methods and techniques transmitted by the content of these programs.

The case of Feminismo Comunitário that initially proposed to create a mobile phone application so that women could communicate, with agility, situations in which they were victims of violence stand out. During the participation in the activities of the Initiative, they could see the weaknesses of the proposal such as the scarcity of access and poor quality of the Internet in the

neighborhoods where they intended to act, as well as that potential users could not afford to purchase smartphones. They then reformulated their performance by creating face-to-face activities such as, rounds of conversation in which women's access to the information and guidance necessary to know and make use of their rights. Another example is the collective Wilifa that intended to create the 'Biennial of Sebos', defined as an action of multiplying books sebum 'nas quebradas' (on the peripheries) stimulating reading as a transforming agent of people, especially children and young people. They migrated to run a project in a Municipal Center for The Care of Children and Adolescents, where they offered young users classes in dance, theater, robotics, discotheque and behavior in recruitment and selection processes. Although the project was discontinued at the time of the research due to the pandemic, the closure of the Center's activities and the lack of resources, the two founders interviewed ensured that:

"We intend to resume the activities of this front. We are looking for another space and we do not stop looking for other edicts because the proposal is for us to be able to get back on our feet financially to continue. And if nothing goes right we will try 'kitty' because the intention is not to stop" (Wilifa).

What can be deduced from the narratives is that, overcoming the limitations of the pandemic, almost all participating groups intend to continue their performance, except for O Que Você Quer Ser (What you want to be) whose members dispersed after the end of classes; and the Clima Mobilidade (Climate Mobility) that claims its dependence on changing public policies on the climate issue and the emergence of funding opportunities.

It is observed, however, that such continuity does not mean the implementation and consolidation of the original idea/action/project presented by the participating group during the registration in the notices. This is because most of them assumed face-to-face encounters and physical displacements that could be less used in the 'new normal' future because they became preventative in the pandemic period. It is likely that this experience will provide the creation of new ideas of interaction, encouraging groups to seek innovations either in their way of acting or in the type of solution they have been proposing to the social problems to which they were dedicated.

It should also be added that the majority of the projects with which they started their participation in the Network were modified in more or less essential aspects, due to influences and learning obtained in the training programs and mentoring activities offered by the Institute's initiative. This is a positive aspect resulting from the functioning of the Innovation Community Network because it allows us to conclude that the act of experiencing it inspired these people and groups, who were already sensitized to social action to persist in their purposes, illuminating their paths to the realization of actions. However, it did not ensure that they could continue as active groups, nor that they would establish more solid and permanent interactions with each other.

The actions and projects that the participating groups proposed and those that carried out are predominantly of local scope, which emphasizes the importance of the territory, since such 'rooting' provides improvement of diagnoses and interventions, in order to better adapt to the specificities of the communities (Comini, 2016). Several comments of the interviewees emphasized the importance of their groups having built, in this way, a specific identity because they knew better the needs, expectations and 'pains' of their communities and, thus, recognize each other during the activities of the Network.

Opinions in the opposite direction reinforce this conclusion about the importance of territorial insertion, for example, when the Gaia interviewee emphasizes:

"The Jatobás Institute has focused more on NGOs in the South Zone, which is different from our NGO profile, but even so we were able to exchange some stickers, but the exchange of ideas of proposals was more with Jatobás himself. The other organizations have a greater similarity..."

I think they talk more among them because they're there regionally, because they feel more similar."

Although the groups consider that the actions they proposed constitute social innovations, it was observed that they do not necessarily present innovative characteristics. At most, interventions are sought to positively increase some aspects of the socio-economic condition of the target populations. Thus, as the Atelier Cendira and Conexão Musas that seek to create projects and conditions for generating income of people in their communities. And the Agency Solano Trindade, The Urban Women and Wilifa, each with different types of action and in various regions, but all with the purpose of strengthening cultural entrepreneurship.

The innovative purpose explained by the Social Innovation Community Network sought to consolidate itself as an active network of participating groups and/or the stimulation of these groups to constitute new community networks, whether by territorial identity or by the similarities of the proposed actions, or by convergence in the care of certain specific target populations. With this result, we would obtain the exchange of experiences, ideas, skills and competencies that generate intense dissemination of knowledge, in addition to intensifying the operationalization of actions, optimizing the use of resources and strengthening social participation in communities (Avelino, 2019; Cipolla & Afonso, 2018).

The Jatobás Institute provided face-to-face activities that aimed to create the conditions for this result to be obtained, such as the program of training in design thinking that is considered, by almost the unanimity of the interviewees, as an excellent opportunity for technical training, which allowed them to improve their projects and even allowed them to review their roles as social actors in search of promoting transformations. In the same line, mentoring activities, even when carried out at a distance due to the pandemic, sought to establish synergy between the groups, encouraging people to know each other better, pointing out similarities between ideas and propositions, indicating possibilities of joint work.

Some statements, in this sense, show the tendency to obtain this result even if it has not been consolidated, through the formation of partnerships and lasting strategic alliances:

"With the Network we met Wilifa.... the arq coop people for whom we gave an interview in a 'live'... I even tried to do a project with Mauro from the recycling it would be another collection point at the Fair... because we bring public and become an effective space of sustainability... With Wilifa, it helped me more directly with some projects.... with the writing of projects" (Meninas Girls).

"... we had there some projects that had a lot to do with us, for example, the É Bom Ver a Cidade (Is Good To See the City) ... who also worked with teenagers, only with a different methodology... also had O Que Você Quer Ser (What You Want to Be), which was the Senac (National Commercial Learning Service) crowd that had a lot to do with us because they were young people trying to pursue a professional career and we wanted to partner with them within our prototype... but it didn't go. But there were some projects that gave match..." (Wilifa).

These are reports that indicate that to obtain the result of forming partnerships and enhance the formation of networks, Jatobás' initiative would need greater persistence both in terms of duration of activities and the offer of financial support, because the process is slow and subject to setbacks in the face of the weakening that can reach it. In addition to using some criteria that facilitate interaction, such as shared territorial insertion, alignment of expectations, convergence of methods and objectives that would allow structuring the common management of alliances (Fischer, 2002).

The narratives of the participating groups that did not establish partnerships are indicative of the challenges specific to the formation of networks, such as the testimony of the interviewee of *Reflexões da Liberdade* (The Reflections of Freedom), in which it is observed that the objective of strengthening their institutional identity and maintaining a personalized

relationship with the Institute exceeded, at that moment, the expectation of allying with the network's partners:

"Because Reflections is in a way Emerson's institutionalization. I already did a series of activities, with my CPF (Individual Taxpayer Registration Number) and had a real desire to turn these activities into an organization. The first steps were taken together with the staff of the Jatobás Institute...."

Or, the case of Diversifix, whose narrative shows that the characteristics of this group did not align with most of the other, in terms of territoriality, focus on target population and conception of the organizational model:

"Trading with the other groups ended up being very poor, because our project was much more focused on the corporate environment and other projects did not ... we had a start-up vision. We wanted to start in São Paulo and go to the world and the other projects were: 'eu atuo no Jardim Paulista' ('I work in Jardim Paulista'), 'estou em Itaquera' ('I'm in Itaquera'). This one is much more localized and not business-oriented, but to serve individuals. For this kind of focus of the projects did not have many opportunities to make exchanges.... the Institute has invested in projects that are outside the entrepreneurial standard."

The testimony of the interviewee from IPA Brazil highlights the discomfort with the lack of continuity of activities that would not have allowed to intensify the formation of partnerships:

"As I did not know how to continue the formations... I don't know if it would be through Facebook or through new meetings, so it was like this on the air for me. I didn't quite understand how it would continue, because I know the idea of these formations was to continue as a network. So from that moment on is that we could have this narrower contact.... our expectation was to meet more people and make themselves known.... have a greater capillarity."

For the interviewee of the Teatro Container (Container Theater), her group did not benefit from the Network because she considers it more valuable to establish a solid relationship with the Institute. He highlighted that the attempt to build the network through communication through whatsapp also resulted fruitless because, in the midst of a pandemic, each was concerned and very focused on solving the survival of the project itself:

".. it was very difficult for us to integrate, to find out where the other could fit into me, where I could fit into the other... I always said it was the Achilles heel of the process of how to make a net."

However, although she did not consider that jatobás' initiative achieved this goal, when reporting how training activities had influenced the change of her original project, she emphasized how this performance required her to be able to establish relationships with other social actors, evidencing her learning of collaborative work:

"... so we began to understand that they had no interest in watching the shows – not the children, not the homeless people – but they used the bathroom, they hung their clothes, they made use of the space to do what they couldn't do on the street. So we understood that we could act differently and was creating a space of coexistence there in the external area. Then we started doing a social mediation job with Luis, with the social workers of the City Hall and we started integrating them ... No longer mediated by the theater but mediated by people's own practices."

Development of Participating Groups - Organizational and Institutional Development -

According to Avelino et al (2019), Empowerment is a process by which actors gain the ability to mobilize resources to achieve a goal, which depends on facilitating conditions that allow individuals and groups to manage and maintain psychological resources to pursue objectives that are important to them. In the analysis of organizational development, four possible situations were identified: a) Strategic redirection with change of the scope of action of the initiative; b) Validation of the scope of action; c) Little or no change; and d) Discontinuity.

In general, the initiatives had few sudden deviations from what was planned. The ideas were improved, but without leaving the route of what had been drawn. The proposals submitted, in general, were still in idea format when the organizations began work at the Jatobás Institute, gaining a more robust and feasible form as the Innovation Community Network contributed to training workshops and mentoring.

Approximately 20% of the participating groups were not able to make the organizational objectives possible and their initiatives were discontinued. The interviewees' statements tended to give their opinion that the participation of their group in the Network provided them with organizational development through the refinement of the scope of action.

"The edict allowed us to go a little further. We managed to reach other places... We were able to look at the collective in order to propose other actions, in addition to what we already did" (Mulheres Urbanas).

"We were making corrections, of course. Cutting things to simplify what we wanted to do, as I said we wanted the world. And we had to get it fixed. 'oh! this we will not do here, we need to focus on that'." (Diversifix)

"The mentoring was fundamental for us to understand who we were and who we were going to act with, who our target audience was and minimally establish the products and methodologies that we had" (É bom de ver, cidade - It's good to see, city).

"The end result of having participated in the methodology and the result that we obtained in relation to our proposal I found very interesting, because you end up being discouraged. This place that we chose several times had received an activity of Limpa Brasil (Clean Brazil) and it was still dirty, right? And I ended up thinking, is it worth our effort? Is that enough? Are we on the right track?" [The search results] strengthened that doubt a little. We were a little desed with the issue of task forces (thinking about no longer performing them) ... but, on the contrary, it ended up encouraging us to continue with these actions (Limpa Brasil).

It was interesting to note that although the objectives of institutional development were not expressed by the Jatobás initiative or by the groups that applied, it can be observed that in some cases the interviewees perceived the gain of institutional maturity, revealed by the reconfiguration of their way of functioning. For example the accounts of the leaders of the Container Theatre and the Meninas Mahin (Mahin Girls).

"We started to have more vision of business and financial sustainability. This was very darkened, very clear. We're a social impact business. We will help these girls as far as we can help, but we also need to generate income." (Mahin Girls)

"So it was also interesting for us to understand that we could act differently. Who opened this look was the issue of Divergent Positive, which gave, thus, a new perspective, a different horizon so that we could walk... a new knowledge" (Container Theatre).

It can be seen that the Network contributed more strongly to the maturing of organizations for those participating groups that were at the time of 'ideation', or conception of their projects and who were more open to 'let go' of their original ideas. It was particularly effective in these cases to train in the design thinking method, mainly because they conducted 'empathy research' that proved to be essential instruments for remodeling the proposals.

On the other hand, the most mature and structured organizations such as Gaia, Agência Solano Trindade, Ipa Brasil, Limpa Brasil and MPR Reciclagem were practically unaffected in their organizational and institutional characteristics, not least because they applied for the notices with a project proposal or program that was only a small part of their performance.

It was noticed that the initiatives that were led by entrepreneurs with more experience in other training and acceleration programs did not perceive significant gains in organizational development, but incremental changes in projects. This may indicate that the greatest value aggregation that the innovation community network proposal can generate for the participating

groups was precisely to leverage the organizational development of those who were in an early stage of ideation.

Development of Individual Skills and Competences - The network's activity highlighted more frequently as contributing to the development of skills and knowledge by the interviewees was the training program in design thinking, especially the experiences carried out with empathy research, which led to the deepening of diagnoses and refinement of the scopes of action. The contribution mentioned secondly by the interviewees was the opportunity to employ the results of these researches and other knowledge obtained with the lectures and, mainly, with the mentoring sessions to improve the original idea of their projects and develop their own individual competencies.

"It was great as self-perception, as a process of self-development..." (Escrevendo o Futuro - Writing the Future)

"... I talk about the gain of consistency, gain of seriousness, gain of relevance, gain of knowing how to organize our ideas ..." (Desacelera - Slow down).

"... I think I've grown a lot compared to my person myself... I came to understand that this issue of feminism has several aspects..." (Urban Women).

Fleury and Fleury (2001, p. 188) defines competence as knowing how to act responsible and recognized, which implies mobilizing, integrating, transferring knowledge, resources, skills, which add economic value to the organization and social value to the individual.

That is, having competence means being able to put into practice the knowledge that one has and that can be applied in a given social or organizational context. Dutra (2004) explains that individual competence is expressed in two aspects: skills (or inputs), which consist of knowledge, skills, attitudes and values (KSAV), which constitutes a kind of stock that the person has; and, the effective delivery of them to the organization to add value. Knowledge is information stored in the intellect and retrieved to interpret facts; skills mean proficiency to perform operations; attitudes consist of evaluative findings or predisposition to something; and values are rationalized conceptions that influence choices of means and ends (Fernandes, 2013). Fleury and Fleury (2004) classify individual competencies as: business, technical-professional and social. Business skills are related to the organization's interaction with the environment, the market and the various stakeholders. Technical skills are distinguished by being based on systematized technical knowledge that can be acquired by learning and training. Social skills emphasize the ability to interact with other people, communicate, work as a team, exercise leadership, etc.

The interviewees pointed out that participation in the Innovation Community Network allowed them to obtain technical knowledge (such as the use of design thinking tools) and develop skills (organize ideas, structure a project, design the intervention) which are essential to develop some technical-professional and social skills, such as:

✓ Project Management: "To be able to structure the proposal and bridge the project" (Desacelera)

✓ Systemic Vision: "Understanding the micro politics of the locality" (SP Lab/Agrogyn); "Translocal Expansion" (Muhers Urbanas)

✓ Articulation and Partnerships: "New contacts and synergies to enable projects" (Wilifa)

Perception of Value Absorbed by Participating Groups - In this report we used the DHC - descending hierarchical classification - and FAC - factor analysis of correspondence. Also according to Ramos, Lima and Amaral-Rosa (2018) the Descending Hierarchical Classification can serve for a more general introductory mapping of the corpus. It is used to confirm or infer trends suggested by lexical groupings in Content Analysis. In the FAC, it is presented the different groupings of words or subjects that constitute each of the classes proposed in DHC (Camargo & Justo, 2013; Camargo & Justo, S.d.; Kami et al., 2016).

The file containing the "corpus" was structured with the answers of two questions suggested by the interview script that is in the Validation Matrix, which sought to identify the benefits of participation in the Network from the point of view of the interviewees.

The participating groups were coded according to the characteristics identified in the tabulation described in the Panel, where each was classified by organizational formality/informality and by the continuity or not of the action that was proposed when it was included in the Network. To identify the value perceived by the interviewees in participating in the Network, the Descending Hierarchical Classification (DHC) of IRAMUTEQ was initially used. After the initial statistical analysis, the software was able to relate 21 responses (texts) and 142 text segments (TS) were found, with 126 TSs (89%), that is, above 70% which is the percentage of use necessary to not compromise the complete analysis. The content analyzed by the software was categorized into 7 classes.

It is observed that class 2 is one of the most representative with 23 TSs and 18.2% of representativeness of the total. The most frequent words in it are: important, supportive, understanding, passing and thinking. This class was called "Mentoring and Direction", in which the interviewees' opinions about the importance of having participated not only for financial support, but also for mentoring and opportunities to rethink how to structure the initiative are aggregated. This value is more associated with the formal groups whose initial projects have undergone changes and have had some continuity until the moment of this research. Some excerpts, with the highest representation scores illustrate these findings:

"Look, I understand it wasn't just a benefit, it was some. First of enabling the same project, the most important is this. Also of the people having gone through the process of mentoring, which I think was very important also not only the issue of financial contribution" (Wilifa - score: 132.28).

"This was very important for us, the point of direct as well. It was Edu who gave me this cue, they showed that we had to intend, because if we wanted to only talk about "slow" on a site, it would not be a move, it would have to intend even" (Slows down - score: 125.18).

"We're connecting with people from a long time ago. I think this is also giving a certain security, because we have a supporter, who at the same time is partner and is not just a supporter. I think this, is also an advantage to think new things" (Conexão Musas - Muses Connection - score: 110.08).

"I think this one I quoted, to look at our work with same work value, and not just a hobby, that is not considered a job. And thinking about this issue of projects, we were able to structure it better" (Mulheres Urbanas - Urban Women - score: 104.81).

This class is subrelated to class 5 which has been called "New Initiatives". It has 14 TSs with 11% total of representativeness. The most frequent words were: new, rethinking, new perspective. This factor was more prevalent for formally structured organizations. Some of the interview excerpts of this class are:

"We are still moving towards the idea of everything online now, but we understand that this is the new language (...). If that's the tool we have these days, we're going to use it to do the best we can. We realized that this is the new language, so we are already doing a new planning so that our courses are offered virtually" (IPA Brazil - score: 112-74).

It was interesting to note that the groups that did not continue the registered project also indicated this category as relevant, emphasizing the opportunity to rethink their own way of acting, as in the case of Diversifix:

"Having this knowledge that there is something like this gives us hope even to start a new project in the future. It is much more accurate, where to achieve an acceleration (...)" (Diversifix - score: 67-63).

The third category with the highest representativeness (13%) refers to Financing, presenting 17 TSs. The most frequent words are: time, depend, achieve. It appeared more frequently in informal organizations whose actions are being continued, but with modifications:

"Because money, it is importante indeed, but if we can structure as a company and as a business is what I think is perfect. It is that, for example, we no longer need to depend on edicts because I believe that this is the proposal at the end of the day... like us, like Wilifa, we do not depend forever and that we can enable projects that are social, but that we can also have some money as well. Wilifa, we have no intention of being a NGO We depend today, because we can't make a budget. It's just that we can get a pro-labore" (Wilifa -score: 91.11).

The fourth category of perceived value (Class 4) presented 14 TSs with 11% of representativeness and refers to Discovery of Purpose. The most frequent words were: perform, purpose, discover. The interviewees' statements go towards accomplishing the purpose, to shape what the project offers in terms of consistency and gain of experience. The highlight of these opinions was more frequent in the interviews of the formal organizations, as exemplified in the excerpts below:

"And knowing other collectives and other projects, this gain from experience and knowledge is the most important. The satisfaction of having managed to carry out a work, that our proposal has achieved our objectives" (Diversifix - score: 81.97).

"I think I've been talking throughout the conversation, but trying to systematize, I think I've had gains in the way the Desacelera has been taking in realizing our vocation (...). We were able to bring to practice the learnings we had in the exchange with the Institute. I'm not very good at it, I'm prolix, let me think, I talked about gaining consistency." (Desacelera - score: 73-69).

"The program made it possible for us to accomplish our project in a much deeper and more qualified way." (Sao Paulo Lab/Agrogyn - score: 59.29).

"When it brings consistency, it brings a form. We looked at what we had, we were able to recognize what we had, organize and clean, give another way and name it." (Desacelera - score: 53.43).

"I think that during the course of the project, we realized this importance of making our purpose clearer. By the name of the collective, people know that it is a collective that minimally deals with racial issues." (Encrespados - score: 44.25).

"A sentence I would summarize as an experience, we knew nothing of edict or social project. We've gained a lot of experience. I summarize how I gain the experience, I think it sums up well, what we achieved with the announcement". (O que você quer ser - score: 40.63).

It was observed that class 6, together with class 2, is one of the most representative with 23 TSs and 18.2% of representativeness of the total. This class is subrelated to classes 2 and 5 as well as to classes 3 and 4. The most frequent words are: space, there, shed and training. We call this category as Physical Space and Welcoming. In this category, the references to the physical space such as Galpão ZL and the symbolic space created by the welcoming attitude that the interviewees felt received from the people of the Institute are emphasized. The excerpts below demonstrate, including that such mentions were generalized in the interviews, not depending on the type of organization and the status of their actions:

"It was, at least for me, I mean, a way of seeing things... the opportunity to meet other people, to use the space there of the shed, it was very important" (Wilifa - score: 91.81).

"When I go into any coworking space, anywhere, any incubator, I see a single profile there. All people are the same, I also do not see myself there, I do not see Angelica, I do not see Thaís" (Diversifix - score: 62.87).

"We had accelerations, both collective and individual ... as the formations were led by women, it was another life. I had a welcoming space, they thought about the formations, we came with a breathing process before" (Meninas Mahin - score: 61.03).

"Even our workshops, we were able to do there. And what we were also worried about, in space, and we managed to develop the workshops there" (Wilifa - score:60.08).

"You get at Galpão, it is an oasis, a wonderful coworking, a collaborative space, transformative, huge, beautiful (...). We breathed and had a period of decompression. The deal then came all that welcoming process. So it opened up space for everyone, that was a differential for me" (Meninas Mahin - score:51.13).

"As a person, I always had the objective of being able to transform, of having the open space of action in the territory and understand how to help in the best way" (Arcoop+ - score: 48.67).

"It may be interesting to strengthen other places in the city, so that spaces with more value are also seen. Perhaps these features would make much more difference in a Parelheiros restaurant. Everything is impactful, feels that there was will and search for these inspirations" (Coalizão Clima Mobilidade - score: 48.11).

"In a somewhat selfish way, because I wanted to know their place in Pardinhos. I asked why they didn't do an event there. The online network works, but having an immersive event has more to do with who makes all the difference" (Agrogyn - score: 44.47).

The sixth category was called "Network Contacts", in which the interviewees reported the contacts established by influence of participation in the Innovation Community Network. A comment that stands out for the high frequency of positive references was what highlighted the importance of Isabel's presence and role. But it is evident that the understanding of the majority of respondents is that being in a network means being in relationship with the Jatobás Institute. This category (Class 1) presented 11 TSs with 14% of representativeness and is composed of words such as: contact, network, personal, which can be found in the excerpts of the interviews: *"I think, in personal terms, the gain was to be part of that network. The work of the social entrepreneur who wants to make a difference is so lonely... so it's good to be part of a network with people you know" (Agrogyn - score: 113.88).*

"Documents such as letters of recommendation have also been issued and (the interviewee) understands that this is a gain. Learning with design thinking was also something that for people who understand networking is very strengthening" (Ateliê Cendira - score: 112.70).

"To see our collective in a way to propose our actions and participate in other edicts. Personal gain was the experience, contact with the network and with other collectives, with the space of Inova ZL that is very innovative, which is something that we do not have in the periphery" (Mulheres Urbanas - score: 107.09).

"In relation to the project, the gain was the partnership regardless of the announcement or support, because the partnership offers this open channel, to ask for help for people, such as Bel, Renata and all the people with whom we had contact" (Atelier Cendira - score: 105.00).

"I called Isabel to help me structure an initiative for my NGO, for the relationship I created with her, mentoring. I believe a lot in this personal contact, I trust and like her opinions." (Agrogyn - score: 90.95).

The last category (class 7), with 21 TSs, presented 16% of representativeness. It is also sub-related to the other ones. Words that emerged from this class are: stimulus, listening, support and was called Personal Support.

"And it was very, very interesting this moment with the Jatobás Institute, because they helped in pricing, helped bring to the paper what were already my practices, because the Reflexões is in a way the institutionalization of Emerson (...). That was the big gain with the staff of Jatobás, this was initially because after we continued on the journey and they supporting projects, they had the demand I had some desires (...). But with the Jatobás Institute, they only added, only helped our positioning, the first support of resources was with the staff of the Jatobás Institute, they supported my person and then supported the Reflexões da Liberdade" (Reflexões da Liberdade - score: 150-70).

"But what I think is an interesting strategy, to integrate, for example. I say, I never received economic support from Jatobás, but I can not say that it was not a great supporter of our (...). It's great to be able to have someone who can make that connection, who listened to us and who helped us organize. I think that was remarkable, it was the biggest gain and I think it will continue to be the biggest gain" (Conexões Musas - score: 63-30).

CONCLUSION

The perception of value in participating in a social initiative such as the Innovation Community Network ranges from support, which is not only about financial resources, but also involves understanding the propositions, through the monitoring that led participants to reflect and restructure their initiatives. Through monitoring and training programs, the groups were realizing the external environment and were designing new actions to put their projects on their feet. Additionally, some groups were able to accomplish the purpose, shape the project, gain experience and consistency. Since a change that takes into account the specific characteristics of the target population, which led one of the groups to abandon the proposal to create an application to focus on welcoming actions to address the issue of violence against women. Even the radical change of offering their physical space to provide a little comfort and well-being to street dwellers when they imagined bringing theatrical shows to children, it is observed that the new knowledge absorbed were important for the participating groups to ensure the continuity of their actions.

However, some groups mentioned that Jatobás' initiative could offer more practical and better structured programs. Mainly, so that they can survive without having a continuous dependence on applying for new edicts to enable their social projects.

A very important point mentioned by the interviewees concerns the territory where their groups promote their actions. There were several comments in the sense of the importance of there being spaces for innovation in the periphery, such as Galpão ZL, even to promote meetings and events of the Innovation Community Network, as well as other initiatives aimed at networking. One of the essential aspects to stimulate the formation and consolidation of networks focused on social innovation is to enable the empowerment and autonomy of the groups invited to participate, whether formal or collective organizations and formal associations. The development of these groups can take place in the sense of the formalization of their organizational model and their legal status, or only in the sense of improving their operating structure. But regardless of greater or lesser formalization, the important thing is that it evolves towards strengthening its identity, acquires institutional legitimacy and, with it, develops its capabilities, which are characterized as organizational competencies.

The Social Innovation Community Network initiative of the Jatobás Institute allowed the participating groups to validate the scope of action and, in some cases, to profoundly modify their social activities. The gain of institutional "musculature" was visible mainly in the groups that were in the ideation phase. However, the heterogeneity of the initiatives, either because they are at different phases in the organizational life cycle, or because they are not acting in the same territory or with 'causes' and similar methods made it difficult to form a network, or multiple community networks and strategic partnerships.

A very positive aspect of the methodology used by the Jatobás initiative was the association between theory and practice, mainly in the support offered through 'tailor made' mentoring practices, which helped the participating groups to find customized solutions to the challenges faced. They even abound to positive references to the people of the Institute who worked in these activities and stood out for their interest, dedication and commitment. The same result does not appear in the statements of the interviewees from formal, more mature and structured organizations, for whom the programmatic content of these workshops was not a novelty. There are also criticisms about the inadequacy of the language of facilitators – excessive use of English words and sophisticated expressions - and of the practical examples and cases reported

– that would not take into account the Brazilian reality, or the type of communities where social actions are carried out.

The survey of opinions and perceptions of the interviewees about the value absorbed with the experience in the Network brings some important contributions for reflection on the composition of the groups:

- ✓ Groups that operate in the same territory enable partnerships between participants, joint actions and, therefore, can increase local development.
- ✓ Groups that work in the same social segment (target population or activity) enable greater exchange of experiences and, therefore, can stimulate organizational development and strengthen institutional identity.
- ✓ Composition of groups with very diverse institutional status (formal X informal; mature X in the ideation phase) has made the management of the Innovation Community Network more complex and can hinder the formation of networks and strategic partnerships focused on social innovation.
- ✓ The moment of the life cycle in which each participating group (mature or in the ideation phase) influences the perception of its members about the value absorbed with their participation in the activities and events promoted by the Innovation Community Network. Collectives and associations that have been informal, little structured and have not had many previous experiences of support and training value more the opportunities they had to exercise work in collaboration and the exchange of networked knowledge. The most mature participating groups with some degree of organizational and institutional formalization tend to value mentoring to validate their way of acting and reformulation of their project, mainly because they result in personalized service and solutions.

REFERENCES

- Anderson, T., Curtis, A., Wittig, C. (2014) *Definition and theory in social innovation* (MA thesis), Krems, Danube University Krems.
- Avelino, F., Dumitru, A., Cipolla, C., Kunze, I., & Wittmayer, J. (2019). *Translocal empowerment in transformative social innovation networks*. *European Planning Studies*, 28(5), 955–977. <https://doi.org/10.1080/09654313.2019.1578339>
- Bandura, A. (1977), “Self-efficacy: toward a unifying theory of behavioral change”, *Psychological Review*, Vol. 84 No. 2, pp. 191-215.
- Bardin, L. (1977). *The Content Analysis*. Paris: PUF.
- Brígido V., & Justo, A. M. (2013). *Tutorial para uso do software de análise textual IRAMUTEQ*. Universidade Federal de Santa Catarina - Laboratório de Psicologia Social Da Comunicação e Cognição - Laccos, 1–18.
- Camargo, B. V., & Justo, A. M. (2013). *IRAMUTEQ: Um software gratuito para análise de dados textuais*. *Temas Em Psicologia*, 21(2), 513–518. <https://doi.org/10.9788/tp2013.2-16>
- Camargo, B. V., Justo, A. M. (S.d.). *Tutorial para uso do software IRAMUTEQ*. Recuperado de: <https://goo.gl/22jP4X>.
- Caulier-Grice, J. et al. (2012). Defining Social Innovation. In: A deliverable of the project: “The theoretical, empirical and policy foundations for building social innovation in Europe” (TEPSIE), European Commission – 7th Framework Programme. Bruxelas: European Commission, DG Research, p. 1–43.
- Cipolla, C. & Afonso, R. (2018). *Social innovations in Brazil: how do social innovations flourish?*. *Atlas of Social Innovation*. <https://www.socialinnovationatlas.net/>
- Comini, G. (2016). *Negócios sociais e inovação social: um retrato de experiências brasileiras* (tese de livre-docência). <http://www.teses.usp.br/teses/disponiveis/livredocencia/12/tde-15122016-143942/pt-br.php>

- Dees, G. J., Haas, M., & Haas, P. (1998). The Meaning of “Social Entrepreneurship”. *Working Paper*, The Kauffman Center for Entrepreneurial Leadership.
- Dutra, J. S. (2004). *Competências: Conceitos e Instrumentos para a Gestão de Pessoas na Empresa Moderna*. São Paulo: Atlas
- Fernandes, B. H. R. (2013). *Gestão Estratégica de Pessoas com Foco em Competências*. Rio de Janeiro: Campus.
- Fischer, R.M. (2002). *Desafio da colaboração: práticas de responsabilidade social entre empresa e terceiro setor*. São Paulo: Editora Gente
- Fleury, M. T. L., & Fleury, A. C. C. (2004). Alinhando estratégia e competências. *Revista de administração de empresas*, 44(1), 44-57.
- Fleury, M. T. L., & Fleury, A. C. C. (2001). Construindo o conceito de competência. *RAC – Revista de Administração Contemporânea*, v. 5, p. 183-196, Ed. Especial, 2001.
- Fontan, Jean-M.; Klein, Juan-L.; Tremblay, Diane-G. (2010). Innovation and society: broadening the analysis of the territorial effects of innovation. Research Note no 2004-07A. Canada Research Chair on the Socio-Organizational Challenges of the Knowledge Economy. Télé-université/Université du Québec à Montréal, 2004. Available at: . Accessed on: 10 July 2010.
- Grant, R. M., & Baden-Fuller, C. (2004). A knowledge accessing theory of strategic alliances. *Journal of Management Studies*, 41(1), 61–84.
- Kami, M. T. M., Larocca, L. M., Chaves, M. M. N., Lowen, I. M. V., Souza, V. M. P., Goto, D. Y.N. (2016). *Trabalho no consultório na rua: uso do software IRAMUTEQ no apoio à pesquisa qualitativa*. *Escola Anna Nery*, 20(3). DOI: 10.5935/1414-8145.20160069
- Klein, L. L., Bortolaso, I. V. and Minà, A. (2020), "The impact of social features underlying inter-organizational networks on learning: insights from Brazilian evidence", *Journal of Business & Industrial Marketing*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/JBIM-01-2020-0058>.
- Le Boterf, G. (1995). De la compétence – essai sur un attracteur étrange. In: Les éditions d’organisations. Paris: Quatrième Tirage, 1995.
- Menand, L. (1997). The return of pragmatism, *American Heritage*.
- Nohria, N., & Garcia-Pont, C. (1991). Global strategic linkages and industry structure. *Strategic Management Journal*, 12(Special Issue: Global Strategy), 105–124.
- Phills, J. A. & Deiglmeier, K.; Miller, D.T. (2008). Rediscovering Social Innovation. *Stanford Social Innovation Review*, Fall, 34-43.
- Ramos, M. G., Lima, V. M. do R., & Amaral-Rosa, M. P. (2018). *Contribuições do software IRAMUTEQ para a Análise Textual Discursiva*. *Congresso Ibero-Americano Em Investigação Qualitativa*, 1(July), 505–514.
- Spreitzer, G. (1995), “Psychological empowerment in the workplace: dimensions, measurement, and validation”, *The Academy of Management Journal*, Vol. 38 No. 5, pp. 1442-1465.
- Szegedi, K.; Fulop, Gyula; Bereczk, Adam. (2016). Relationships between Social Entrepreneurship, CSR and Social Innovation: In Theory and Practice. *World Academy of Science, Engineering and Technology International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering* Vol:10, No:5, 2016.
- Tardif, C., & Harrisson, D. (2005). Complémentarité, convergence et transversalité: la conceptualisation de l’innovation sociale au CRISES. In: CRISES. Centre de Recherche Sur Les Innovations Sociales. Cahiers du CRISES. Québec.
- Van de Vrande, V., Vanhaverbeke, W., & Duysters, G. (2011). Technology in-sourcing and the creation of pioneering technologies. *Journal of Product Innovation Management*, 28(6, SI), 974–9.