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ORIGINAL ARTICLE

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ABSTRACT

Purpose: To identify partnership research challenges and facilitators, as experienced by members of the Inclusive Society (IS) initiative.

Materials and methods: A case study was conducted on all partnership research projects conducted between 2017 and 2019 under the IS initiative through surveys, interviews with the IS community, logbooks, and focus group. Thematic analysis and descriptive analysis were undertaken.

Results: To work effectively with a diversity of stakeholders, winning conditions must be created for the project from the outset. These include determining the team functioning, project objectives, the expectations of each party, and agreeing on a realistic action plan. Project implementation with concern for sustained stakeholder commitment, good working relationships, and achieving project objectives requires organizational planning that favours partner involvement, shared leadership, agreed methods for communicating, conflict resolution methods, recognition of each participant's expertise, and creating a climate of trust. Upon concluding a partnership research project, it is essential to devote time to implement project results in local environments and to ascertain their usefulness to partners.

Conclusions:: IS partnership research challenges and facilitators are similar to those identified in past research. Despite this knowledge, challenges persist. Future research could explore tools and practices from other domain to overcome partnership research challenges.

> **IMPLICATIONS FOR REHABILITATION**
> - Partnership research has the potential to contribute to a more inclusive society for people with disabilities.
> - Challenges and facilitators are identified for the stages of creating, implementing, and completing a partnership research project.
> - Suggested solutions are offered to facilitate the conduct of a partnership research project and to increase the project's chances of success.
> - Partnership research could benefit from using tools from other fields such as community development and social innovation to successfully implement some of the facilitators and overcome specific barriers to partnership research.

Introduction

Partnership research for an inclusive society

Almost one in five Canadians live with a disability [1]. In this context, a more inclusive society is one that promotes the rights of people with disabilities and their full participation in society on an equal footing with other members of the community [2]. Social participation refers to a person's ability to perform everyday activities and social roles [3]. An inclusive society ensures that people with disabilities have access to physical, social, economic, technological, and cultural environments, as well as to health and education services. This statement calls for the development and implementation of innovative solutions by multiple actors.

Examples of such solutions are inclusive museum practices and universal accessibility action plans [4].

However, this ambitious goal requires rethinking conventional ways of doing research in order to find transformative and systemic solutions that will be sustainable and beneficial to the community. Social innovation makes it possible to implement more effective, fairer, and more sustainable solutions to increasingly complex social problems. According to the work of the Quebec social innovation network, social innovation must be based on a combination of experiential, scientific, and technical knowledge, and consider the cultural context [5]. By placing users, community members, or a group of health and social service professionals at the heart of the research process, participatory

research aims to produce useful and transferable results, taking into account the knowledge and expertise of those involved [6]. In the field of disability studies and inclusive research, participatory research is also seen as a way for people with disabilities to play an active role in identifying research priorities and in the research process itself [7], respecting the following expression "nothing about us without us" [8]. In the rehabilitation research community, participatory research is also seen as a way to bring research closer to clinical practice [9]. Whereas some authors conflate partnership research and action research, collaborative or participatory research, partnership with patients or the public, and integrated knowledge translation, others clearly set it apart [10,11]. For the purpose of this article, partnership research is presented as a form of participatory research in which researchers and partners (representatives of civil society, community, municipal, private, and governmental organizations, people with disabilities, or other stakeholders) work closely together as research co-investigators [11]. The advantages of such an approach are numerous: greater social relevance of research, better-adapted tools and interventions, and greater potential for the appropriation of the results by the user communities [6, 12]. However, participatory research, or partnership research, is a demanding task for researchers and partners in terms of the time, energy and skills required [6]. The added value of this type of approach (i.e., the benefits of using this approach in relation to the challenges faced) is not straightforward nor obvious [6]. In this sense, it is both pertinent and important to develop new knowledge that can support participatory approaches while minimizing the challenges they present [6,11].

Hoekstra et al. [11] conducted a review of the scientific literature, providing an overview of the terms, definitions, and descriptions relating to partnership research in order to synthesize the key principles, strategies, outcomes, and impacts and better understand how they operate in different contexts and circumstances. Among other things, the authors proposed four guideline stages: (1) Establishing and maintaining relationships based on shared values between academic researchers and stakeholders (e.g., trust, respect, transparency, and credibility); (2) Determining the level of stakeholder engagement (e.g., information, consultation, involvement, collaboration, and accountability) at each stage of the research process (e.g., planning, implementation, dissemination); (3) Tailoring relevant strategies and principles to align with the needs and preferences of all partners for each stage of the research process; and (4) Evaluating and disseminating the principles, strategies, outcomes, and impacts of partnership research in order to learn from one's own successes and challenges, and to contribute to the advancement of the science of partnership research.

In keeping with the last guideline stage, Nyström and her team [6] drew collaborative process-related lessons from 20 partnership research projects. The projects described were aimed at quality improvement in health and social services. The key challenges identified were managing complexity, conflicting expectations and demands of team members, and resource commitment by partners. These authors emphasize the importance of taking time to develop mutual trust, the resources needed for the project, and effective leadership. Their study is limited, however, by the lack of partner representation in their data collection.

This article discusses an initiative aimed at developing an inclusive society through partnership research, supporting more specifically the social participation of people with disabilities. *Toward a More Inclusive Quebec Society* (Inclusive Society or IS) is an intersectoral research initiative bridging the fields of health, humanities, and social sciences, as well as natural sciences and engineering. Its goal is to foster the creation of more inclusive physical and social environments for people with disabilities. As part of a process of social innovation, all partners engage together at every stage of the research projects to design and implement solutions to reduce barriers to the social participation of people with disabilities. To support the emergence of partnership research projects, IS organizes networking activities in which researchers and representatives from the public, community, and private organizations are invited to discuss their research interests and organizational needs regarding the social participation of people with disabilities. Stakeholders with common interests are then contacted by IS to form teams and submit a project for funding. The calls for projects are funded by IS and other sources. Once a project is accepted for funding, an intersectoral collaboration agent (ICA) is assigned to the team, to provide support and assistance throughout the project. The ICA assists in setting up a project monitoring committee, documenting the completion of project milestones, supporting partner, researcher, and student participation, and conducting knowledge mobilisation activities.

In response to Hoekstra et al.'s [11] proposal to evaluate and disseminate one's own experiences to contribute to the advancement of the science of partnership research and based on a case study, this paper presents the challenges and facilitators experienced by research partners of the IS initiative, in the context of a first call for project proposals. Through descriptions of the methods used to identify the challenges and facilitators, as well as a summary tables and a detailed description of the results, the authors' intent being to disseminate as best they can the lessons learned by IS on the establishment of partnership research projects.

Objective of the study

Considering the growing interest in partnership research and its effects on the inclusion of people with disabilities, as well as the semantic and empirical plurality of participatory research, this article contributes to knowledge development by identifying the challenges and facilitators of partnership research aimed at the inclusion of people with disabilities, as experienced by the different IS actors. The challenges will refer to obstacles that have impeded the smooth running of the partnership research project, and the facilitators will, on the contrary, include elements that have facilitated it.

Transparency is an important scientific criterion in all qualitative research projects, so here are some of the research team's initial ideas of what the results of this study might have been: (a) researchers and partners encountered as many barriers as facilitators in the partnership research process; (b) all stakeholders perceived that they lacked the time and money to complete the projects as they would have liked; (c) the expectations of the partners and researchers may have been different in some projects; (d) the participation of the partners was unequal according to their capacity to provide resources (especially human resources) for the research project; (e) communication between the different stakeholders is a key element in the successful conduct of partnership research.

Methods

Research design

The case study approach was chosen for this research. This approach may refer to the study of a situation for educational

purposes, an episode of care, or related to a historical event. It is described as an approach rather than a method since this design does not rely on a single methodology but on a multitude of methods that best allow to address the research question(s) [13]. A qualitative case study as a research approach is an empirical inquiry with an in-depth description and analysis of a bounded system in its natural context. The case here is the IS initiative during the 2017–2019 period. This design is particularly relevant for situations in which it is impossible to separate the variables of the phenomenon from their context [14, 15]. Indeed, the IS experience offers a unique opportunity to delve into the challenges and facilitators of real-world partnership research. In this study, the facilitators and experienced barriers are interdependent with IS's partnership research model which explains our choice of the qualitative case study and the IS initiative as a case. Through a triangulation between distinct methods and sources, the qualitative case study generates a rich, in-depth, holistic understanding of the phenomenon under study [16].

Participants

Participants in this study fall into four categories: (1) partners involved in an IS-funded project during the 2017–2019 period, (2) academic researchers working on these IS-funded projects, (3) IS ICAs, and (4) all IS community members subscribing to mailing lists (email, newsletter, Twitter, websites, etc.). Recruitment was carried out by the ICAs who contacted members of the IS research teams individually to invite them to participate in semi-structured interviews. As regards ICAs, all of them agreed to participate in a focus group and to keep a logbook. Finally, a survey was sent on February 5, 2020, by email to all mailing list subscribers ($N = 252$) of the IS community. Follow-up emails were sent on February 10 and 24, 2020, and on March 11 and 23, 2020.

Data collection and procedure

Four methods were used in order to grasp the challenges and facilitators of partnership research within IS: a focus group, a logbook, individual interviews, and a survey.

ICA focus group

The purpose of the focus group was to bring together different people connected through the research theme (in this case, ICAs) and to stimulate discussions in order to bring to light the challenges and facilitators based on the perspectives expressed by participants [16]. The focus group with the three IS ICAs, held in person, was facilitated by a postdoctoral fellow not involved in the project at the time of the focus group (KL) and lasted approximately two hours. The topics discussed included the ICAs' role (e.g., describe your role in the projects funded by IS), communication within project teams (e.g., describe the communication between partners and researchers in general, in the projects you are involved in), stakeholder engagement and involvement (e.g., how would you describe the engagement of the team members?), the implementation of the research projects (e.g., how would you describe the involvement of the partners, researchers, and students at each stage of the research project?) and the partnership research process in the projects (e.g., what helps the involvement of each team member in the different stages of the project?). The focus group was audio recorded and the data summarized [17]. The summary was forwarded to the ICAs who were invited to verify that the document accurately reflected what was said in the focus group. Minor corrections were made as a result of the ICAs' comments.

ICA logs

A participant logbook enables the collection of rich data on events and reflections in a non-intrusive manner over a period of time at (or near) the time of occurrence [18]. To document successes and setbacks, challenges and obstacles of partnership research, and the ICA's role, the three ICAs kept logs on the interactions with their different teams for about a year. The logs (in digital format) consisted of a table with three columns (date, context/project, comments).

Interviews with partnership research teams (partners and academic researchers) of IS-funded projects

The interviews were an essential tool for understanding how the partnership research was experienced within the teams according to the main stakeholders, i.e., the researchers and partners, since "interviews give access to practices, habits, trajectories, processes and dynamics, reasoning, values, opinions, and representations" [19]. The first series of interviews (Period 1) took place in 2018–2019 when the projects were in their initial stages with 15 researchers and 8 partners. These interviews were approximately 30 min long and were conducted by two IS ICAs via telephone or video conference. The interview formats were pretested with two people to ensure the questions' intelligibility and pertinence. To avoid any conflict of interest, ICAs made sure not to conduct the interviews with teams that they were assigned to monitor. Notes were taken simultaneously by the ICAs conducting the interview. Themes covered included prior experience in partnership research, the context of the current project and development of the project (e.g., describe, in your own words, the project you are involved in.), organization and functioning of the partnership process (e.g., what would you say about the partnership dynamics during the project?), expectations (e.g., what are your expectations of the project?), challenges encountered (e.g., what are the main challenges of this partnership project?), solutions found (e.g., if you had to do the project over again, what would you change?), perceived effects of partnership research (e.g., do you consider that the project has met the expectations of the partner(s)? Explain.), and recommendations for future projects (e.g., what are the most important elements in partnership research?). The second series of interviews were conducted with the same persons in the winter of 2020 during the final phase of the projects and addressed the same themes. A total of 23 interviews per period were conducted.

Survey to all inclusive society community members subscribing to mailing lists

Surveys make it possible to rapidly gather information, including impressions and opinions, from a large number of people [20]. This tool was useful in complementing perceptions of partnership research with data from a larger number of people involved in IS. The survey used was based on the Partnership Analysis Grid [21]. This grid was developed from a concertation framework [22]. It was then improved and validated (face validity), on two separate occasions, by members of the partnership "La participation sociale des aînés: des savoirs à l'action" [21]. To our knowledge, the metrological characteristics of this grid have not been evaluated. Since a descriptive analysis was used and the data produced supported the data collection with qualitative methods, this grid, consistent

with the research objective, was adequate for the needs of this study. The Partnership Analysis Grid assesses several aspects of the partnership (e.g., motivations, relationships, expectations, functioning, governance) using two measurement scales (importance attributed and satisfaction). The tool was modified to assess perceptions of partnership research practises regarding the entire duration of the projects. It was submitted to the research team twice to ensure face validity [20]. It was subsequently formatted into a web-based survey using Microsoft Forms software [23]. The survey included approximately 67 questions rated on a 7-point Likert scale with responses ranging from "completely disagree" to "completely agree" or "completely dissatisfied" to "completely satisfied." It should be noted that the response "not applicable" was also available. Participants needed around 25 min to complete the survey. A total of 103 people opened the survey, but 54 participants (52%) were eliminated because they had not completed at least half of the survey (including two who hadn't provided consent and 44 who hadn't responded to any of the questions). We included in the sample those who had completed at least 8 sections out of 14, i.e., 47 participants. Of these, 36 (77%) had fully completed the survey and 7 (15%) had completed 13 out of 14 sections. Specifically, the questionnaires of 18 researchers, 18 partners, 5 postdoctoral fellows, and 2 students are included in the results. Four other questionnaires were also considered in the results, but the status of those who completed them was not mentioned.

Data analysis

Data from the focus group with the ICAs, their logs, and Period 1 and 2 semi-structured interviews with research teams were thematically analyzed [24]. The thematic analysis consisted of the identification and discursive examination of the themes and sub-themes addressed in a corpus of data, which may be varied in nature, to progressively answer the research question [24]. Thematic analysis is a relevant method to use when seeking to understand a set of experiences across a data set [25]. First, an ICA categorized the notes from the Period 1 semi-structured interviews in Word [26] to produce a table presenting the results by theme. This table was verified and improved by the participants in Period 2 interviews. Subsequently, the two postdoctoral fellows (KL and AT) integrated the data from the logs and the focus group into the existing themes or used them to generate new themes. Several iterations (5–7, depending on themes) were needed to refine them. Virtual meetings and comments on a shared digital document helped to build consensus on the final themes.

Descriptive analyses of the results of the quantitative survey were carried out. Subsequently, the "somewhat agree/satisfied" to "completely agree/satisfied" scale points were aggregated to form an "agree/satisfied" category. The other three categories were "neither agree/satisfied", "disagree/dissatisfied", "completely disagree/dissatisfied". Percentages for each of these categories were then calculated. To simplify the text, we have chosen to present the results by reporting the "agree/satisfied" category only. This implies that the remaining percentage represents the other three categories.

Results

A total of 73 people participated in the study. Of this number, it is possible that some individuals contributed to both interviews and questionnaires. Three people, namely the ICAs, participated in the focus group and completed a logbook. Their experience

in partnership research ranged from 3 to 10 years. For the semi-structured interviews, 23 people participated at time 0 and 1, including 8 partners and 15 researchers. The latter were studying in various fields ($n = 6$ in health, $n = 5$ in society and culture, $n = 4$ in nature and technology). Their experience also varied between no experience ($n = 7$), 3–10 years of experience ($n = 7$), and 10+ years of experience ($n = 9$). Regarding the questionnaire's respondents, 47 were retained for analysis: 18 researchers, 18 partners, 5 postdoctoral fellows, 2 graduate students, and 4 other who did not specify their status. Of these, 22 worked in the field of health, 16 in society and culture, 4 in nature and technology, and 5 who did not specify. Finally, experience in research partnerships ranged between none ($n = 19$), 3–10 years ($n = 17$), and 10 years or more ($n = 11$) (Table 1).

A number of challenges and facilitators emerged from the various data sources (focus groups, logbooks, interviews, and survey). They were arranged chronologically in order to facilitate the identification of challenges and facilitators according to the different stages of a partnership research project: (1) initiation, (2) implementation, and (3) closure. A summary table of facilitators is proposed for each research time period in order to support the implementation of these practices by future partnership research teams.

Initiating a partnership research project

Initiating a partnership research project involves challenges and facilitators at several levels: team composition, project development, clarifying intellectual property issues, and establishing team communication and collaboration. Table 2 presents a synthesis of facilitators in the initial stages of a partnership research project.

Putting together the partnership research team

Within a partnership approach, team composition implies a diversity of actors with varied knowledge. This diversity was seen as a benefit, in order to grasp the multiple facets of a complex problem and to cross perspectives. Moreover, the participation of people with disabilities and partners is a challenge if the conditions to support their participation are absent (such as remuneration for example). Discussing these conditions with potential partners was therefore considered to be a facilitating factor. Other factors were team members having prior shared work experience and having an interest in the research. Study participants emphasized the importance of having a complete team, including a large number of people with complementary expertise (students, researchers, and partners), who are flexible and open to working in partnership, and have a shared starting point, goals, and values. When teams were large, the partnership often had a "core" of several more actively engaged actors. Participants recommended ensuring that partners were committed to remaining engaged until the end of the project.

Developing the research project

Identifying common needs and objectives. One of the main challenges mentioned with respect to the research projects was to properly identify each stakeholder's needs. *"It has to speak to them. It's a question of motivation, they have to see the added value, feel challenged. That the research question emerges from the needs of the partner(s)"* (interview researcher 1). The ICA involved in the data analysis observed that teams of researcher-driven projects tend to experience more challenges: "*these are two partners who are less satisfied with the partnership*" .

Table 1. Methods and participants of the study.

Methods	Focus group (N = 3ᵃ)	Logbooks (N=3ᵃ)	Interviews (N = 23ᵇ)	Survey (N = 47ᵇ)
Status				
Researchers			15	18
Partners			8	18
Postdoctoral fellows				5
Students				2
ICA	3	3		
Others				4
Area of research for researchers, postdoctoral fellows and students				
Health			6	22
Society and culture			5	16
Nature and technology			4	4
Not mentioned				5
Experience in partnership research				
No or little experience	0		7	19
3–10 years	2		7	17
10 years or more	1		9	11

ᵃThe same individuals participated in the focus group and logbook keeping.
ᵇIt is possible that interview participants also responded to the survey.

However, 96% of participants agreed that, within their projects, the needs and constraints of the partners and researchers had been expressed. In addition, 87% of the participants agreed that the partners had been involved in identifying the research questions. One team, which had participation difficulties (due to health issues experienced by one of its members), explained that their project nevertheless progressed because the team had a shared goal: "*we felt it worked*" (interview researcher 8). Participants recommended to carefully define goals to ensure that they are specific and realistic enough and to follow the plan. In fact, 87% of survey respondents said that partnership participants worked "fairly well" to "extremely well" together, allowing the development of goals that were generally understood and supported by the partners.

Discussing expectations and roles. Expectations can be either an obstacle in projects (e.g., political pressure, partners taking up too much space to the detriment of others, disappointment, dissatisfaction, withdrawal) or a lever (e.g., mobilization, interest, engagement, dissemination). As a result, it was recommended to ensure that expectations in relation to engagement are clear to all and that they are met.

The majority of the survey respondents (73%) were satisfied with the definition and understanding of the expectations by partnership participants. The same was true for individual expectations. In addition, in most teams, the roles and responsibilities of each person had indeed been defined beforehand (83% of participants agreed). Moreover, 85% of participants were satisfied with their role within the research team and 83% were also satisfied with their influence within the team.

The deliverables to be produced during the project could also consolidate partner commitment. Partners want their involvement in the field to be more effective. Participants stressed the importance of developing realistic projects and work statements as regards resources and, consequently, setting limits for the project: "*too much ambitious*" (interview researcher 10). It should be noted that 77% of the survey participants were satisfied with the partners' common understanding of the project and its stakes.

A participant specified that partners should:

"*Ensure understanding of the research context and financial and time constraints. Partners must be informed of the risks relating to research results (possibility of a negative outcome). It is also necessary to specify the process*

of scientific dissemination based on publishable results and the peer review process." (interview researcher 7)

Understanding the research perspective is a facilitator. In this sense, it was suggested to provide training to partners on the concept of social innovation. In fact, 85% of the survey participants agreed that the roles and expectations in relation to the project deliverables were explicit and 82% were satisfied with the participants' understanding of what research is and how it fits into the project.

Clarifying intellectual property, data ownership and copyright issues

The co-construction inherent in some participatory research projects inevitably leads to confusion as regards issues of intellectual property, data ownership, and copyright. The main challenge was to clarify this aspect early on in the project. Some participants expressed disappointment that a contractual agreement was not signed at the outset. Some ethics committees also raised questions around this issue with project teams (in terms of access to data, influence on the project, impact, etc.). Several universities and research centres offered support to researchers in relation to this aspect. Is it the researcher's or the team's responsibility to establish an agreement with the partners? Does IS have a responsibility to assist project teams in this regard?

Establishing communication and collaboration between members of the partnership research team

The ICAs observed that the duration of the collaboration, particularly for members who had been working together for a long time, influenced the quality of communication. In this sense, a kick-off meeting to explain the project and allow team members to get to know each other in order to better reconcile and understand differences in organizational cultures and work approaches appeared to be a good practice. Although online meetings are effective, some participants recommended taking the time to meet in person to give members who are less familiar with each other the opportunity to connect. One team came up with the idea of doing activities outside of the research project to strengthen ties between members:

"*X invited us to the organization's (annual) event. […] I felt that it was a good 'teambuilding' initiative and participating in an activity organized by a partner, outside of the research program, was beneficial in strengthening the bond between us all.*" (logbook ICA 1)

Table 2. Summary of facilitators in the initial stages of a partnership project.

Project stages	Facilitators
Putting together a partnership research team	– Discussing and creating the conditions necessary for partner participation – Having prior work experience with the partner – Having an interest in the research topic – Being flexible and open to working with other stakeholders – Being able to count on the team and ensuring partner engagement from the beginning to the end of the project – Sharing a starting point in relation to a problem, as well as common objectives and values – Having complementary expertise and a team that includes students, researchers, partners, and ICAs
Developing the research project	– Discussing expectations and needs – Clearly defining each person's role – Remaining alert to the fact that the process can become cumbersome for partners –Having one or more well-defined, specific, and realistic common objectives –Ensuring that the objectives meet the partners' needs and expectations –Recognizing and drawing limits for the project –Ensuring understanding of the research context and financial and time constraints –Informing partners of the risks associated with project results (possibility of negative outcomes) –Clarifying the scientific dissemination process based on publishable results and the peer review process –Understanding the research perspective and, to this end, providing training in social innovation and social impact –Ensuring that expectations regarding commitment, project vision, and deliverables are clear and that they are met. Partners want to be able to use the deliverables
Clarifying intellectual property, data ownership and copyright issues	–Proposing a template of partnership agreement to protect intellectual property rights at the outset of a project –Separating patents for each project even when the partners involved in the projects concerned are the same –Providing access to expert assistance on this issue
Establishing communication and collaboration among partnership research team members	–Conducting a kick-off meeting to explain the project and give team members the opportunity to get to know each other

Table 3. Summary of facilitators in partnership research implementation.

Project stages	Facilitators
Leadership of the partnership research project	–Putting in place in a progressive manner (by stage or milestone) consultation and governance structures that support the common vision –Establishing a structure to facilitate partner engagement –Strong scientific leadership to ensure work progress –Sharing leadership and decision-making to ensure equality in the relationship
Maintaining communication, collaboration and relationships within the team	–Ensuring that information is shared with all team members (e.g., keeping a logbook and sharing it with team members to track the progress of the project, writing detailed reports following each meeting) –Taking the time to check in with partners –Ensuring frequent communication with team members –Maintaining clear, open, respectful, transparent and reciprocal communication –Improving communication during the analysis phase –Taking the time to acknowledge and resolve differences of opinion through discussion –Recognizing the importance of interpersonal relationships within the team –Practising active listening –Adopting a kind approach as a researcher –Demonstrating adaptability and flexibility to change –Demonstrating enthusiasm –Creating a climate of trust –Developing a sentiment of camaraderie among stakeholders –As a researcher, demonstrating genuine interest in finding solutions and moving the project forward –As a researcher, remaining available and close to the ground –Being trustworthy and respectful of the partner's needs –As a researcher, being well acquainted with partnership research –Acknowledging the value of partners' participation by recognizing the usefulness of their comments and the information shared. –Recognizing the contribution and credibility of each person and the value of their work.

Implementing a partnership research project

The challenges and facilitators that emerge in the context of research project implementation are tied to the following themes: leading the partnership research project and maintaining communication, collaboration, and relationships within the partnership research team. Table 3 presents a summary of practices that facilitated the implementation of partnership research projects.

Leading a partnership research project

Governance is central to the organization of a partnership research team. It makes explicit the "what" and "how" of the project's success (results/deliverables). Governance has to do with the type of leadership within the team, how it is organized, and the role of each actor.

Team organization varied depending on the team's size and needs, the context within which partners were operating, the

scientific field, and the social innovation stage (emergence, experimentation, or appropriation). In the observed examples, we found teams operating with a steering committee, an executive committee, a monitoring committee, focus groups, working groups, and general assemblies. Because of the presence of a large number of partners, one team even used an outside consultant to facilitate the consultation, which seems to have had a positive effect on the democratic process within the team.

Regardless of the organization, such a process was required to support partner participation in all stages of the project, although it was recognized that regular input from each person at every stage may not be realistic. Sometimes this co-creation process was seen as cumbersome, sometimes as the solution to avoid going back and forth between partners and therefore save time. However, everyone concurred that establishing a partnership necessarily takes time. It is important to understand and take into account the operational and organizational context of each partner in order to put in place measures to facilitate participation and commitment.

> *"Engagement is also influenced by availability, whether the partner is able to get involved, whether the team is asking for too much or not enough."* (focus group ICA 1)

> *"There are different types of partners too. A partner from the private sector, an association and a governmental organization will not have the same capacity for engagement nor the same interests. The way in which partners engage makes a big difference."* (focus group ICA 3)

The level of partner engagement varied across projects. The following is an example of minimal engagement as perceived by ICAs:

> *"I've put my name on the application and that's it. My collaborator is absent. They can't be reached (ICA or team member). No participation, no response to emails, no participation in meetings."* (focus group ICA 2)

Subsequently, some partners were only present at certain stages of the project: *"she can only attend sometimes"* (focus group ICA 3).

Others participated in meetings without providing significant input for various reasons. Ideally, according to the ICAs, the expected level of engagement is for researchers and partners to be actively involved.

> *"They're present at meetings, they read the documentation, participate in analyses."* (focus group ICA 3)

> *"Read the minutes, have opinions, make pertinent comments. They raise certain aspects."* (focus group ICA 2)

> *"Do knowledge transfer together and they do presentations together at scientific conferences. "* (focus group ICA 1)

Partners' degree of engagement also varied over time:

> *"There are partners who are very committed at the beginning and very motivated, but later, because of some factor of their reality or the time of year (action plan, yearly report) they'll be absent [...]. Sometimes these people reengage later in the project."* (focus group ICA 2)

The majority of survey respondents agreed that partners were involved, when applicable, in data collection (86% agree), in the interpretation of results and their implications (67% agree), and in the dissemination of research results (75% agree).

One participant said that a partner's participation in the scientific discussion is pertinent at stages when the team needs their expertise. However, according to one ICA's account

> *"Much of the meeting was about measurement tool selection. Clearly, the partner present didn't get a chance to contribute to the discussion and I thought it was a shame that the team didn't make an effort to include them. At the very end, as we were getting up to leave, a researcher asked him what should be measured. He mentioned things that weren't taken into consideration by the selected measurement tools."* (logbook ICA 2)

It was suggested that a governance structure supporting the shared vision must be gradually put in place. According to ICAs, shared governance, and therefore shared leadership, must be fostered.

> *"Between meetings, it's this cell (researchers and main partner) that moves the project forward, the partner is part of it and knows what's going on."* (focus group ICA 3)

> *"And depending on the nature of the projects, there may be other partners who are also strongly involved. "* (focus group ICA 2)

> *"Sometimes the researchers are really involved, but the partner almost entirely drives the project. [...] If the partner is really powerful like X and has a lot of resources, he is the one who is going to integrate the program, has everything to gain and has a lot of resources."* (focus group ICA 1)

Maintaining communication, collaboration and relationships within the team

Communication methods vary from one team to another. Indeed, 69% of the survey respondents agreed that communication methods included face-to-face meetings, video conferencing, telephone, and email. ICAs noted that some teams have exemplary communication practices.

> *"There are projects where lots of meetings are held, there's regular and effective communication, the research partners are engaged in the team, and the project moves forward."* (focus group ICA 1)

> *"The student in Project X created a logbook in a shared document that she updates regularly. In it, she notes meetings, attendance, and the follow-ups needed."* (Logbook ICA 2)

Some teams, however, encountered communication challenges. Disparities between researcher and partner satisfaction with communication were observed. Some partners identified gaps in communication, including between follow-up actions taken by researchers and what had been agreed with the partners. One partner, for example was confused about meeting dates. Another partner stated the following:

> *"I've had no news on the project since November. I wrote an email to the principal investigator to find out where they were at [...]. She said they haven't contacted [the partner] because they didn't need their feedback."* (Logbook ICA 2)

Some mentioned that following the letter of support and once the project design was done, they received little information about changes to the project. A lot of information was generated around team meetings and project milestones, and one could easily lose track of what was being done. Participants also stated that communication tended to die down when activities are over, and the project moves to the data analysis phase. They believe it is important to ensure follow-up at this stage as well.

> *"One can easily lose track of things during a project, feel 'overwhelmed' with the flow of information. I really think that keeping up note taking and taking notes and making reports that are thorough guarantees good management!"* (logbook ICA 1)

According to others, there was a lack of communication within the partner's organization:

> "The role of organization or member representative, 'spokespersons' sometimes become 'misspeakpersons.' Representatives don't necessarily consult the members [they represent] to validate their positions. Some decisions can take power away from partners." (interview researcher 14)

From the survey results, the majority of partnership research team members agreed that communication was respectful (100% agree), timely (83% agree), pertinent (94% agree), consistent (77% agree), and clear (93% agree), and that efforts were made to develop a common language used by all stakeholders (89% agree). Most participants (87%) agreed that team meetings were held at most stages of the research project.

Ensuring open and authentic communication can be a facilitator while recognizing that other factors can make communication difficult, such as poor partnership consolidation at the beginning, insufficient funding to build a strong partnership structure, or a mishap or unforeseen event. Excellent communication was characterized by participants as clear, open, transparent (i.e., no barriers, free expression), and reciprocal.

The interviews brought to light the fact that the researcher's perception might be that everything is going well, whereas, in reality, frustrations exist within the team. Participants suggested taking the time to check in with partners to see how things are going. It was noted that managing clashing personalities within the team can be a challenge, hence the importance of communication to understand expectations and resolve conflicts. In fact, conflict resolution was hardly discussed by the teams since only 36% of participants agreed that mechanisms for conflict management and resolution existed within the partnership group. The negotiation took place at several stages of the research process (64% agree).

> "The production of the midterm report revealed significant differences in perspective between the lead partner and the researchers. These differences included participant compensation and recruitment challenges […]. These issues were then discussed at a team meeting in October. […] The discussion made it possible to clarify certain aspects. [The partner] is satisfied with the proposed solutions and wishes to continue the collaboration until the project is completed." (logbook ICA 2)

Of the survey respondents who experienced conflict in their project, 82% stated that disagreements were handled openly, rapidly, and informally.

Several of the facilitators described above support partner commitment, the quality of relationships within teams, and prevent conflict situations: understanding each other's reality, having realistic expectations, having common strategies, recognizing the partner's expertise, creating equality in relationships, holding frequent meetings, recognizing the importance of interpersonal relationships, practising active listening, assistance with kindness on the part of the researcher, demonstrating adaptation and flexibility in the face of change, being enthusiastic, creating a climate of trust and finally, creating a sense of camaraderie between the stakeholders. It has been shown that the researcher can play a significant role in the partner's commitment by demonstrating genuine interest in finding solutions together with the partner, being generous with their time, being trustworthy, respectful of the needs of the partner, and well acquainted with partnership research. One participant emphasized the importance of *"differentiating 'consultation' from partnership. The partner's involvement is not the same"* (interview researcher 9).

According to partners, what facilitated their engagement was the perception that their participation was valuable, that their comments were useful to the researchers, and that the sharing of information made it possible to probe deeper into issues. Many of the facilitators described above appear to have been implemented by most research teams. In fact, 85% of survey participants agreed that partners and researchers were able to understand each other's limits and flexibility, that partners and researchers showed appreciation for each other's efforts (83% agree), valued each other's contributions (89% agree), and perceived and identified one another as experts (92% agree). Overall, the majority of respondents (79%) were satisfied with the way the partnership team members worked together. Some even speak of an ethic of partnership research. This includes rigour; creating a common language; taking the time to get to know each other; understanding each other's expectations; interpersonal skills, and good planning.

Closing a partnership research project

The challenges and facilitators related to the closing of a partnership research project revolve around the completion of the research project, the assessment of the partnership, and the transfer of knowledge. Table 4 presents a summary of facilitators for the closing of a partnership research project.

Completing the research project

Participants stressed the importance of linking the project to the partner's activities and monitoring the appropriation of results by communities. It was also pointed out that none of the steps in the social innovation process should be neglected, as they are all important. The research required depth and could not be limited to instant answers. Consequently, it was necessary to allow time

Table 4. Summary of facilitators for the closing of a partnership research project.

Project stages	Facilitators
Completing the research project	–Monitoring the appropriation of results within communities –Respecting every step of the social innovation process –Setting limits to frame project actions
Taking stock of the partnership	–Obtaining assistance in the final stage of the process to identify the next steps, unmet needs and to explore the possibilities of taking projects further –Planning a project appraisal meeting of the team one year after the closing
Transferring knowledge to the community	–Developing a tool to facilitate rapid use of results (prior to scientific publication), in a format that is applicable and transferable to other settings –Involving partners in the knowledge dissemination phase by inviting them to coauthor publications and participate in presentations at scientific conferences –Involving partners in the production of the deliverable in order to enable them to use it –Conducting knowledge transfer activities for the general public –Coaching teams in knowledge dissemination and transfer (e.g., advice on forums, activities and products to be disseminated)

for iteration and validation of results with partners. Many participants commented that the research projects should have been continued after the grant funds ran out. They suggested that developing realistic projects with a clear timeframe is a facilitator insofar as this allows time for knowledge transfer.

Taking stock of the partnership

A total of 57% of the survey participants agreed that partners and researchers discussed potential plans and/or long-term structures to maintain the partnership, but only 30% were satisfied with the assessment that it was pertinent to continue the partnership (of these, however, 28% noted that the statement did not apply to them). Participants suggested that assistance be provided in the final stage of the process to identify the next steps, unmet needs and to explore the possibilities of taking projects further: "*Perhaps at the end of the project, a follow-up schedule (would be) useful*" (interview partner 2). The ICA team would have liked to have documented whether new collaborations will be sustained over time. For example, two researchers who meet through IS and project to maintain long-term collaboration. ICAs would also have liked to know whether non-funded teams continued their partnership. Did they find funding elsewhere? Did they go ahead with the project anyway? Participants also mentioned that it would be useful for teams to meet a year after the project in order to take stock of the situation, to assess the impact of the research in the medium and long term, how they're operating, how their practices have evolved, and their influence on decision-makers. IS could initiate this practice.

Transferring knowledge to the community

Results transfer to the community was an important step for participants, but many research projects did not reach this stage within the duration of the project funding. Indeed, only 40% of survey participants agreed that team meetings were held to discuss a knowledge transfer plan. As facilitators, participants suggested providing assistance to support teams in knowledge dissemination and transfer (e.g., advice on forums, activities, and products to be disseminated). It was also suggested to develop a tool to facilitate the rapid use of results (prior to scientific publication), in a format that is applicable and transferable to other settings. Participants underscored the importance of involving partners in the production of the deliverable and in publications and presentations at scientific conferences. Moreover, they put forward the idea of doing more knowledge transfer activities for the general public. Knowledge dissemination can foster the mobilization of partners *"who might be interested in this approach"* (interview researcher 15). In addition, it was suggested that a "*mechanism be identified to ensure that all partners are absolutely committed to adopting the research results at the end of the project*" (interview partner 4).

Discussion

Main results

The objective of this article was to identify the challenges and facilitators of partnership research as experienced by the various IS actors. Winning conditions were identified for the projects' initial stages, namely to facilitate dealing with the diversity of actors inherent to partnership research and thus avoid frustration and disappointment. These include taking the time to establish the foundations of the partnership by discussing the conditions necessary for the participation of partners and people with disabilities,

agreeing on the starting point, the values underlying the project, and the functioning of the team (including each person's role), defining the project's objectives together and clarifying intellectual property rights. Also important are clarifying team member expectations and realistic planning that takes into consideration resource limits as well as those intrinsic to a research process. For the implementation phase of a partnership research project, the facilitators identified focused on the challenges of maintaining stakeholder commitment, the relationships within the team, and achieving objectives within the set timeframe. Facilitators include operating in a manner that engages and requires the approval of the partners at all phases of the research process according to their availability and allows for the sharing of leadership in order to uphold relationship equality. It was also suggested to agree on ways of transmitting information that ensure clear, open, respectful, transparent, and reciprocal communication. It can be helpful to establish conflict resolution mechanisms accepted by all and to regularly check in with stakeholders to make sure that they don't have concerns. As with most projects, it is important to acknowledge the importance and expertise of each participant and to nurture relationships in a climate of trust. As regards to the concluding phase of a partnership research project, it was deemed essential for the IS teams to devote time to implement the results in the community, to ensure that the results of the project are useful to the partners, and to reflect on opportunities to continue the work in support of the social participation of people with disabilities. ICA were involved in supporting many facilitators identified in this study.

The IS experience in relation to challenges and facilitators is consistent with the existing scientific literature. Among other things, published studies address the challenges related to clarifying stakeholder roles and reconciling the various actors' differing expectations of projects [6, 27–29]. The time and energy required for the process and the pace of the scientific process which contrasts with the rapid decision-making in partner practices have also been observed by Nystrom [6]. Several facilitators discussed in the literature are also consistent with the IS experience, in particular discussing and agreeing on goals, using a range of communication methods [29, 30], power sharing, and devoting time to develop trust and respect within teams [30]. It has also been suggested that researchers invest time in getting to know not only their project partners but also their respective organizations in order to understand the partner's practice context [31]. Moreover, guidelines related to integrated knowledge transfer provide a meaningful basis for supporting the partnership research process in a manner that is consistent with the facilitators identified in the IS experience [32].

Collective action skills and collective intelligence

Despite current knowledge about facilitators and obstacles in partnership research, challenges persist. Facilitators are more difficult to implement than to identify. In this sense, it would be wise to draw inspiration from community development and social innovation practices. For a number of years, practitioners of community development and social innovation have been developing concrete approaches to support collective action and intelligence, which are core challenges encountered in partnership research. Collective action refers to "the collective ability to co-construct, to weave together the expertise and to act in a cross-sectoral manner" [33]. As regards collective intelligence, it refers to the ability of a group to interact around a social issue, based on a process of collective reflection through dialogue and open

collaboration in order to grasp complexity differently [34]. The researcher and the members of the partnership research project team are therefore invited to develop their collective action skills and their collective intelligence. A number of tools and workshops have been designed for the purpose of operationalizing collective action skills, some of which are listed below.

Although projects are undoubtedly co-created with the partners prior to submission for funding, it seems appropriate for a team to review their foundations once the funding has been granted and the project is launched. In the interval between the submission and the acceptance of the project, a number of changes can occur regarding the availability and resources of partners, the focus of the project, new opportunities, the addition of new partners, etc.. Teams Canvas [35] can be a very useful tool for initiating dialogue on the needs, expectations, values, personal and common objectives and functioning of the group. It can also be used to anticipate future difficulties (e.g., conflicts) and to plan potential solutions. Journey Vision [36] is another example of a method for opening up a dialogue about shared vision, values, and potential obstacles. The "15% for Concrete Change" workshop [37] aims to inspire action through realistic goals. Speedboat [38] serves to identify obstacles that slow the project down along the way. The Communagir team has developed a workshop for testing collective action skills that has the potential to bring out pride, avenues for improvement and strengthen commitment [39].

Strengths

This study meets scientific criteria for qualitative research through a high degree of data collection source and method triangulation, researcher triangulation during the analysis phase, and theory triangulation in the discussion [40]. Member checking in Period 2 supports credibility. The transferability criterion is met by the detailed description of the Inclusive Society context.

Limitations

One limitation of this study applies to the survey method. Insofar as the survey was addressed to the entire IS member list, it is possible that respondents referred to partnership research projects from IS sister initiatives such as Social Participation and Inclusive Cities and the Canadian Disability Participation Project. Another limitation of this study is that we did not have information on the age or gender of the participants. Initially, we were concerned about the anonymity of participants, as it may be easy to trace individuals within IS. However, it is possible that age and gender influence how partnership research is experienced. In addition, it could have been useful to verify the diversity and representativeness of participants in terms of age and gender. Lastly, another potential limitation of our study is that more than twice as many researchers than partners participated in the semi-structured interviews. This may lead our results to reflect more of the researchers' experiences rather than those of the partners. The initial recruitment target was 1–2 partners and 1–2 researchers per project. As researchers responded to the call more often than partners, this created a potential inequity in the partners' voices. Considering the importance of sharing the power of voice and decision in partnership research, it would have been more relevant to ensure equity in this representation. We recommend that future research pay particular attention to this aspect during recruitment.

Implications for research and practice

We suggest that the barriers and facilitators to partnership research be explicitly discussed with members of a research team who wish to use this approach. In this way, before the project begins, collaboration agreements and ways to overcome barriers could be identified and thus prevent disappointments or complications along the way. This paper presents challenges and facilitators that may be present during the stages of creating, implementing, and completing a partnership research project. Suggested solutions are offered to facilitate the conduct of a partnership research project and increase the project's chances of success.

Conclusion

This article is intended as a contribution to the development of knowledge and reflection on the issues raised by the partnership research approach. This approach is increasingly encouraged by scientific research funding programs in order to promote the use of knowledge and innovation by civil society actors. The Inclusive Society initiative is part of this context. Identifying the challenges and facilitators perceived by the researchers and partners of projects funded by Inclusive Society will make it possible to lay the groundwork for the development of an operational model for partnership research. The ultimate goal of Inclusive Society is to promote the use of knowledge to change social practices and improve the social participation of people with disabilities.

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Ethical approval

This research was assessed and approved by the Centre for Interdisciplinary Research in Rehabilitation of Greater Montreal (CRIR) Research Ethics Board. All participants gave their written informed consent.

Disclosure statement

No potential conflict of interest was reported by the authors.

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