



Inter-municipal cooperation in Latin America: current situation and future research challenges

Karina Arias Yurisch 1 Karina Retamal Soto 1 Camila Ramos Fuenzalida 1

This article offers an overview of Latin American research on inter-municipal cooperation, a phenomenon that has gained empirical relevance in the region since the 1990s. Based on a systematic literature review and content analysis of 47 articles published between 2005 and 2016 selected from indexed journals (WOS, Scopus, and LatinIndex), this article reports the progress of research, the complexities of the operation, and the different effects of inter-municipal cooperation in Latin American countries. The results identify the main gaps in studies about causes and determinants of 'collaboration' as an organizational model and territorial governance, as well as the lack of studies on the effectiveness of these arrangements. By identifying these gaps it is possible to guide the future research agenda on cooperation between municipalities.

Keywords: inter-municipal cooperation; Latin America; consortium; local government; municipal association.

Cooperação inter-municipal na América Latina: estado da arte e desafios futuros da pesquisa

Este artigo oferece uma visão do estado da pesquisa latino-americana sobre cooperação inter-municipal, um fenômeno que ganhou relevância empírica na região desde a década de 1990. Com base em uma revisão sistemática da literatura e na análise de conteúdo de 47 artigos publicados entre 2005 e 2016 em periódicos indexados em WOS, Scopus e LatinIndex, este artigo informa sobre o andamento da pesquisa sobre as condições relevantes, as complexidades da operação e os diferentes efeitos da cooperação inter-municipal nos países da América Latina. Os resultados identificam as lacunas de pesquisa no estudo de causas e fatores explicativos da colaboração como modelo organizacional e governança territorial, bem como a falta de estudos sobre a efetividade de tais arranjos. A identificação dessas principais lacunas permitirão orientar a futura agenda de pesquisa sobre cooperação entre municípios.

Palavras-chave: cooperação inter-municipal; América Latina; consórcio; governo local; associação municipal.

Cooperación inter-municipal en América Latina: estado del arte y desafíos futuros de la investigación

Este artículo ofrece un panorama del estado de la investigación latinoamericana sobre cooperación intermunicipal, un fenómeno que ha adquirido relevancia empírica en la región desde la década de los años noventa. A partir de una revisión sistemática de la literatura y del análisis de contenido de 47 artículos publicados entre 2005 y 2016 en revistas indexadas en WOS, Scopus y LatinIndex, este trabajo informa acerca de los avances de la investigación sobre los condicionantes relevantes, las complejidades de la operación y los diferentes efectos de la cooperación intermunicipal en países de América Latina. Los resultados identifican las brechas de investigación en el estudio de las causas y los factores explicativos de la colaboración como modelo organizacional y gobernanza territorial, como también la falta de estudios de efectividad de dichos arreglos. La identificación de estas brechas permitirá orientar la agenda de investigación futura sobre cooperación entre municipios.

Palabras clave: cooperación intermunicipal; América Latina; consorcio; gobierno local; asociación municipal.

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¹ Universidad de Santiago de Chile / Departamento de Gestión y Políticas Públicas, Santiago, Chile

INTRODUCTION

Since the 1990s as globalization has gained ground, economic and political transformations have resulted in changes in both the role of the state and the way it functions around the world. These changes, which have blurred traditional institutional boundaries, include privatization processes, decentralization and the creation of semi-public bodies. This has, in turn, led to new ways of governing which involve a wide range of actors in the design and implementation of public policies.

This phenomenon is particularly relevant at the sub-national level. Decentralization processes, together with the growing complexity of local problems, have reshaped the role of local government, which is now characterized by a broader and more far-reaching public policy agenda (Brugué & Gomá, 1998). This new role has not always been accompanied by the transfer of resources, resulting in the dilemma of local autonomy (Caulfield, 2002; Navarro, Rodríguez-Garcia, Mateos, & Muñoz, 2016). In response to this dilemma, cooperative models have emerged as an innovative alternative solution to competition between municipalities (Dowding & Feiock, 2012; Goldsmith, 2005; Hooghe & Marks, 2001).

One aspect that has acquired particular importance is horizontal cooperation between local governments in the form of inter-municipal cooperation, inter-local agreements, public consortia and municipal partnerships. Beyond the diversity of names used, the phenomenon of inter-municipal cooperation (henceforward, IC) can be defined as voluntary collaboration between local governments to solve a common problem or jointly provide a service (Teles, 2016).

In its different contexts, IC has elicited increasing research interest in understanding and improving these forms of local collaboration. In Latin America, interest in this phenomenon is seen most clearly in the framework of the wave of democratization and the implementation of neoliberal policies that occurred together with the increasing development of pro-cooperation institutional frameworks in the region's countries. In this context, information about the state of research into cooperation between municipalities is vital in order to have a comprehensive view of what we know, and what we do not know, about the causes of IC, how it works and its effects.

Starting with a systematic review of the specialized literature on the region, this paper analyzes the state of the art and identifies the gaps as a means of furthering knowledge about Latin American IC. To this end, the paper is divided into four sections. The first discusses the conceptualization of IC in the context of the review of the literature before going on, in the second section, to describe the methodology used to select and analyze the primary sources. The findings and an analysis of the gaps are set out in the third section, followed by the conclusions of the research in the last section.

2. IC AS RESEARCH OBJECT

In general terms, IC is characterized by: a. the participation of two or more local governments; b. the voluntary nature of the relations; and c. a focus on the solution of a common problem or the joint provision of a service.

Each of these elements can vary widely, reflecting the different forms which the phenomenon takes depending on the context. Cooperative arrangements can, for example, be bilateral or multilateral, implying different degrees of complexity in the collective decision-making process (Feiock, 2013).

Cooperation can also arise as a result of the self-organization of local actors or of government mandates. The extent to which relations are voluntary can, therefore, vary (Feiock, 2013; Provan & Lemaire, 2012). Similarly, the formality of cooperation between municipalities can differ, ranging from arrangements based on personal relations to those backed by letters of intent and protocols and through to those that operate through a body with its own legal personality (Dowding & Feiock, 2012).

Finally, relations of cooperation can be geared to a specific purpose or have many different purposes, encompassing different policy areas. Depending on the objective, the cooperation can involve different types of exchange such as of information, technology, services or financial or human resources (Agranoff, 2007).

As regards conceptualization of the phenomenon, the specialized literature can be divided into three different perspectives from which to understand IC as a research object: a. IC as a decision of the agent; b. IC as an organizational model; or c. IC as an institutional arrangement.

In the first case, IC is understood as an individual decision, action or practice of municipal agents that involves a relationship which is assumed to be beneficial. This implies a definition of the cooperative relation as distinct from conflict, competition or indifference (Fuhse, 2009). This does not mean that all these types of relations cannot exist simultaneously between two agents.

In the second case, IC is viewed as a collaborative organizational structure in which municipal actors participate in order to achieve shared objectives. This structure is described as opposed to the traditional bureaucratic model since cooperation is not based on hierarchies but on horizontal relations and the participants' autonomy (Agranoff, 2007). In this sense, the concept has an instrumental nature as a more effective solution than the bureaucratic structure.

Finally, in the third case, IC is understood as a configuration of relations or an institutional arrangement that provides a territory with governability. Under this concept, inter-municipal networks differ from the state, because power is more diluted among the actors, and from the market since the actors are assumed to be interdependent and subject to norms of reciprocity (Powell, 2003).

These three conceptual perspectives provide the framework for the study of IC and serve as a guide for exploring the state of research on the phenomenon in Latin America. The principal contribution of this paper is that it systematizes findings and identifies the research questions to be explored in future studies in order to pave the way for the theoretical construction of the phenomenon and a better understanding of it in the region.

3. METHODOLOGY

In order to investigate the state of the art of research on IC in Latin America, a systematic review of the relevant literature in the field was carried out. Forty-seven articles, published in indexed journals, were selected and analyzed, using categorical content analysis.

A search strategy in journals indexed in WOS, Scopus and Latindex was employed to select the articles to be analyzed. It involved the following protocol:

- 1. Using the search engines of Web of Science (principal collection), Scopus and Dialnet, searches were performed for a wide range of keywords: "inter-municipal", "interlocal", "shared service provision", "local public network" and "municipal association". In the case of searches of articles in Spanish, the terms "consorcios municipales", "mancomunidades" and "asociacionismo municipal" were incorporated. It is important to note that searches were not restricted by discipline, year or region. A total of 484 articles were found, with 165, 294 and 25 corresponding to WOS, Scopus and Dialnet, respectively.
- 2. The abstracts of the 484 articles were read in order to identify those referring to the phenomenon in at least one Latin American country. This process reduced the number of articles to 47, which constituted the primary sources of the bibliographic review.

The articles selected (Box 1) are from disciplines such as geography and urbanism, management and public policies, the environment and health. They were published between 2005 and 2016 and refer principally to six countries led by Brazil and Mexico.

BOX 1 ARTICLE SAMPLE

Journal		
(Nº of articles)	Author (Year)	Country
Revista de Administração Pública (7)	Angnes, Mattos, Klozovski, and Sturm (2013); Matos and Dias (2011); Xavier et al. (2013); Machado and Andrade (2014); Abrucio, Filippim, and Dieguez (2013); Galindo, Cordeiro, Villani, Barbosa, and Rodrigues (2014); Gerigk and Pessali (2014)	Brazil
Revista Gestión y Política Pública (3)	Rodriguez-Oreggia and Tuirán (2006); Chávez-Ángeles and Sánchez-Medina (2013); Salazar, Polendo, and Ibarra (2011)	Mexico
Urban Public Economics Review (3)	Serralvo (2006); Kinto (2009); Da Silva and Periera Ceccon (2011)	Brazil Mexico
Saúde e Sociedade (3)	De Morais and Chaves (2016); Prosenewicz and Lippi (2012); Barreto (2015)	Brazil
Studia Politicae (2)	Mazzalay, Camps, and Sarmiento (2006); Mazzalay (2016)	Argentina
Revista Brasileira de Planejamento e Desenvolvimento (2)	Ferracini (2013); Wolfart et al. (2013)	Brazil

Contine

Journal (№ of articles)	Author (Year)	Country
International Journal of Health Planning and Management (2)	Teixeira, Bugarin, and Dourado (2006); Brito e Silva and Bezerra (2011)	Brazil
Estudios Demográficos y Urbanos (2)	Zentella Gómez (2005); Ramírez (2012)	Mexico
Environment and Urbanization (2)	Hardoy et al. (2011); Montero, Castellón, Martínez, Ruvalcaba, and Llamas (2006)	Mexico Latin America
Engenharia Sanitaria e Ambiental (2)	Suzuki and Gomes (2009); Piterman, Rezende, and Heller (2016)	Brazil
Other journals (19): Bulletin of Latin American Research, Caderno CRH, Cadernos de Saúde Pública, Climate and Development, Entorno Geográfico, Espacios, Eure, Geosaberes, Journal of Environment & Development, Líder, Mapping, Polígonos, Revista de Gestão em Sistemas de Saúde, Revista de Métodos Cuantitativos para la Economía y la Empresa, Revista de Saúde Pública, Revista del Clad, Revista Mexicana de Sociología, Visión de Futuro, Waste Management	Mazzalay (2011); De Lacerda (2011); Santos and Giovanella (2016); Pereira, Barreto, and Pittock (2009); Bolaños (2015); Matos and Dias (2012); Lacerda and Ribeiro (2014); Leal and Souza (2016); Safford (2010); Pellin, Dallabrida, and Cioce (2014); Poyatos and Giron (2009); Nicolli (2006); Wolfart et al. (2014); Guillermo et al. (2015); Amaral and Blatt (2011); Filippim and Abrucio (2016); Amaya (2011); Garzón (2010); Buenrostro Delgado et al. (2008)	Argentina Brazil Colombia Guatemala Mexico

Source: Elaborated by the authors.

These 47 articles were analyzed using an open coding process together with pre-established categories (Bowen & Bowen, 2008). In the open coding process, attention was paid to the research question, conceptualization and the methods and results of each article. During the review, codes were created to reflect the relevant topics of the studies, including a wide range of emerging codes referring, for example, to different areas of public policy, type of territory (rural/urban) and type of actors.

At the same time, in order to organize the articles according to fundamental dimensions related to the causes, operation and effects of IC, the protocol of analysis included the use of categories and concepts taken from the literature on IC (Teles, 2016) and networks in the public sector (Agranoff, 2007; Provan & Lemaire, 2012).

Once the sources had been coded, a matrix was built through which to perform contrast and comparative analysis. The results of the analyses were organized in three sections referring to the causes and determinants of IC, its operation and its effects and consequences.

4. RESULTS AND DISCUSSION

4.1 About the causes and determinants of IC

The empirical material reviewed included a group of studies about the causes of IC based on the premises of collective action theory (Olson, 1965) and game theory models (Ostrom, 1998) as a means of understanding the decision to cooperate and the behavior strategies adopted by agents in situations of cooperation. A smaller group of studies, based on the theories of sociological institutionalism (DiMaggio & Powell, 1983; Meyer & Rowan, 1977) incorporate the role of the perceptions and beliefs embedded in the context as factors that influence propensity to collaborate. Latin American researchers have given priority to the design of descriptive studies, using case studies, and explanatory studies using regression models, simulations and analysis of networks.

The results of the analyses of the causes presented in these studies were organized in a matrix based on the three conceptual perspectives of IC and three levels of analysis: micro (individual), meso (group) and macro (contextual). This matrix, shown in Box 2, sets out the findings of the literature and the gaps about the causes of IC in Latin America.

BOX 2 SUMMARY OF THE DETERMINANTS OF IC BY LEVEL AND CONCEPTUAL PERSPECTIVE

Conceptual	Level of analysis		
perspective	Micro	Meso	Macro
IC as decision of agents	(1) Characteristics of the municipality Characteristics of the population	(2) Attributes of peers Geographical proximity Prior relations Homophily* Dependence of resources*	(3) Institutional barriers and incentives Interdependence and severity of problem
IC as organizational model	(4) Normative isomorphism* Membership of a network*	(5) Mimetic isomorphism* Policy learning*	(6) Coercive isomorphism* Policy diffusion*
IC as institutional arrangement	(7) Institutional entrepreneur*	(8) Capacity of group to create rules of self-organization	(9) Common resource Institutional fragmentation Macro processes (e.g. decentralization)*

Source: Elaborated by the authors.

As regards the characteristics of the municipal agents who influence the decision to cooperate, the literature on Latin America identifies the level of municipal debt, institutional capabilities and the size of municipalities (Mazzalay et al., 2006; Pellin et al., 2014; Piterman et al., 2016; Rodríguez-Oreggia & Tuirán, 2006) and the type of local leaderships (Mazzalay, 2016) as relevant factors. Given the diversity of designs and conceptualizations used in these studies, it was not possible to carry out an analysis to compare the weight of these factors or the direction of their effects. However, the data does provide a description of the range of factors or types of causes that facilitate or hamper the emergence of IC in Latin America.

^{*} Indicates research gap.

Studies of the characteristics of the peer or cooperating group that influence the agent's decision to collaborate address the question of who to cooperate with or who cooperates with whom. The literature on Latin America shows that cooperation is conditioned by the political identity of mayors, geographical proximity and prior relations or social capital (Abrucio et al., 2013; Angnes et al., 2013; Mazzalay et al., 2006; Mazzalay, 2011; Mazzalay, 2016; Piterman et al., 2016; Rodríguez-Oreggia & Tuirán, 2006). The degree of financial dependence between municipal agents (Gulati & Gargiulo, 1999; Pfeffer & Salancik, 1978) and the effect of professional equivalence or shared histories among the actors (Cross, Borgatti, & Parker, 2002; Robins, Lewis, & Wang, 2012) are factors not present in the Latin American discussion.

In the case of the characteristics of the context that influence the decision to cooperate, the studies reviewed indicate that they include the level of interdependence (Mazzalay, 2011) and the severity of the common problems (Brito e Silva & Bezerra, 2011). Institutional incentives such as public programs or pro-cooperation legislation (Brito e Silva & Bezerra, 2011; Rodríguez-Oreggia & Tuirán, 2006) and the existence of a regional administrative political unit (Mazzalay et al., 2006; Mazzalay, 2016) are also relevant. The studies highlight the growing institutionalization of state incentives, but more research is required into its influence on cooperation, which continues to be a matter of debate internationally (Post, 2004). In addition, it is necessary to explore the institutional incentives and barriers created by the marked centralism typical of Latin American countries.

In the set of literature analyzed, no findings related to the conceptualization of cooperation as an organizational model were identified. This implies opportunities for exploration in the context of the region. For example, the literature on IC is underlain by a discourse of a prescriptive nature that promotes the adoption of collaborative management models at an inter-municipal level. This discourse can itself be understood as a possible determinant of cooperation in that it legitimizes and validates one model over another, fostering processes of diffusion and transfer at the inter-local level. One possible research avenue would, therefore, be to apply theoretical approaches from the public policy diffusion and transfer school (Dolowitz & Marsh, 2000) and/or from the sociological institutionalism (Scott, 2008).

The adoption of the collaborative type of organization could be explained by the normative effect of certain professions of the agents or their membership of certain networks; the effect of imitation of a peer (mimetic isomorphism) or group public policy learning; and/or contextual characteristics such as external pressures in the form of persuasion by international organizations or a government mandate.

In the case of cooperation as an institutional arrangement, theoretical and empirical knowledge is scarce both in Latin America and internationally. Despite this gap, public policy theories that identify actors who promote political changes (Sabatier, 2007) serve as an input for debate in this area. In this case, it is interesting to study the characteristics of the actor who takes an entrepreneurial role in promoting institutional arrangements and, thereby, fosters cooperation among the other actors.

As regards group characteristics that foster or hamper the creation of collaborative institutional arrangements, the Latin American literature includes studies showing that the establishment of sanctions for abandoning a collaborative agreement (Teixeira et al., 2006) and the *ex ante* definition of pro rata contracts (Machado & Andrade, 2014) facilitate the group's cooperation.

Finally, case studies explore contextual characteristics and the nature of the problem as factors in the creation of collaborative institutional arrangements between municipalities. Examples of these include the problems of producing and allocating a common resource (Chavez & Sanchez, 2013) and the identification of metropolitan problems (De Lacerda, 2011; Zentella, 2005). Among Latin American studies, no work appears to have been undertaken on the role of macro processes related to neoliberalism and decentralization that could help to explain the establishment of cooperative institutional arrangements in the regional context. This potential explanation could provide important insights since, in Latin America, these macro processes imply a weakening of municipalities' capacity to address their problems.

Overall, there has been progress on research into the causes of IC in the region, but gaps persist. Work has focused on testing factors that explain the phenomenon as a decision on the part of a municipal agent and has paid less attention to the determinants of cooperation as an organizational model or institutional arrangement. These gaps represent new research avenues for the region.

4.2 About the operation of IC

The question about the operation and organization of IC is important because the high degrees of autonomy maintained by the participants and the voluntary nature of the cooperative phenomenon mean that integration of interests and stability cannot be achieved in the traditional hierarchical manner (McGuire & Agranoff, 2011; Milward, 1996; Provan & Lemaire, 2012).

Studies in Latin America have sought to address this question through descriptive research which explores the operational processes that facilitate or hamper IC as regards decision-making, resource management and patterns of values, beliefs and shared expectations. Findings and gaps in each of these key areas of the operation of IC are shown in Box 3.

BOX 3 SUMMARY OF THE OPERATIONAL DIMENSIONS OF IC

	Operational dimensions		
Collective decision-making process	Governance structure of the network Consensus-building and negotiation Balance of asymmetrical policies*		
Management of collaboration	Leveraging of external resources Management of staff turnover and resistance		
Inter-organizational culture	Management of clash of organizational cultures Construction of an imaginary and common identity*		

Source: Elaborated by the authors.

^{*} Indicates research gap.

Decision-making. The literature reviewed reports collective decision-making structures based on collegiate bodies that delegate implementation of their decisions to an executive secretary (Galindo et al., 2014) as well as others with a structure of political and technical committees (Safford, 2010). In addition, there are reports of the creation of new structures of institutional arrangements between municipalities that incorporate other social actors in the decision-making process (Matos & Dias, 2011).

There is no evidence in the literature of other forms of organization such as those led by a central municipality which are commonly found in the specialized Anglo-Saxon literature (Kenis & Provan, 2006). This represents a research opportunity to advance in the construction of typologies that reflect the situation in Latin America. An interesting starting point can be found in the work of Ramírez (2012) who identifies types of collaborative organizations among Mexican municipalities.

In collaborative contexts, the decision-making process implies recognition of the interdependence of resources and skills which, in turn, calls for negotiation and consensus-building (Shmueli, Kaufman, & Ozawa, 2008). In the Latin American literature, difficulties in this area are reported in cases where there is a co-existence of political and technical discourses which reproduce divisions that affect consensus in decision-making (Safford, 2010) as well as conflicts of interest that undermine operation of the cooperation (Gerigk & Pessali, 2014). In the latter case, the consequences of asymmetries of power in negotiating the distribution of the benefits among the participants are apparent.

When some actors do not have the capacity, status or resources to participate on equal terms with others, the collaborative process can be vulnerable to manipulation by the strongest actors (Ansell & Gash, 2007; Susskind & Cruikshank, 1987; Walker et al., 2006). In this case, the development of leaderships and strategies to empower the weaker or under-represented groups in the decision-making process is critical (Fawcett et al., 1995; Lasker & Weiss, 2003). In the Latin American literature, there is a growing, but still insufficient, interest in studying leadership as a crucial element for achieving consensus among the parties and facilitating the implementation of agreements (Filippim & Abrucio, 2016; Galindo et al., 2014).

Resource management. Under collaborative models, financial and human resources depend heavily on the contributions of the participants, implying that their management acquires particular characteristics. The Latin American literature describes the challenges of obtaining and managing financial resources, underlining the importance of external financing for the development of cooperation (Angnes et al., 2013; De Morais & Chaves, 2016). This challenge is particularly important in Latin America where municipalities are structurally dependent on the central level for financial resources.

The literature also reports the complexities of human resource management in a context of high turnover of administrative and technical teams (Agnes et al., 2013; Brito e Silva & Bezerra, 2011; Galindo et al., 2014) and a lack of clear policies to promote a favorable attitude towards cooperation among municipal bureaucratic counterparts (Angnes et al., 2013; Brito e Silva & Bezerra, 2011; Dos Santos & Giovanella, 2016). In these latter cases, municipal personnel who

do not participate directly in cooperative relations become an obstacle to the achievement of their objectives.

Inter-organizational culture. The diversity of actors brought together by the cooperative model can be a source of important difficulties in terms of clashes of organizational culture (Provan & Lemaire, 2012). The participants may have different visions or ways of understanding the problem and expectations about the reasons for collaboration.

The need to find common cultural elements among the participants is implicit in the Latin American literature. Piterman et al. (2016), for example, highlight the importance of values like solidarity, common norms and trust as factors that facilitate the development of a consortium. Similarly, Montero et al. (2006) identify the existence of different expectations about participation as a problem for the operation of a collaborative organization. Finally, Angnes et al. (2013) discuss the problems posed by different visions, perceptions and discourses in a case of collaboration.

Internationally, there are studies of how the construction of a collective identity and a common imaginary can facilitate implementation of collective action, helping to coordinate efforts without inhibiting the actors' creativity and initiative (Goldstein & Butler, 2010). This research could serve as a guide for future studies on the cultural clashes experienced by collaborative organizations and on the way in which Latin American IC has been building narratives or common identities.

In all, Latin American studies of the operation and functioning of IC provide, through case studies, rich descriptions of the decision-making process, resource management and inter-organizational culture. However, they do not go into the factors that explain its operation, a tendency also seen in international research on cooperation. Recently, efforts have begun to be made to develop second-order theories based on comparative case studies (Agranoff, 2007; Innes & Booher, 2010), a line of research that offers an opportunity for work on Latin America.

4.3 About the effects and consequences of IC

In the review of the literature, studies were identified that explore a third line of research focusing on the effects and results of IC. They are principally quantitative (regression and time series) and qualitative (case studies).

Their results can be organized according to the scale on which the effects are evaluated - local, intermunicipal or regional - and three pillars of evaluation of IC: efficiency and fulfillment of objectives, achievements and impacts, and interaction with citizens. Based on the interrelation between these pillars and scales, a matrix was constructed (Box 4) showing the findings and gaps of the literature on the effects of IC in Latin America.

BOX 4

SUMMARY OF THE CRITERIA FOR EVALUATION OF IC

Scale	Level of performance		
Scale	Efficiency	Impact	Legitimacy
Local (Municipality)	(1) Efficiency in municipal spending Municipal innovation*	(2) Effectiveness of the local solution	(3) Local legitimacy Election results
Inter-municipal (Collaborative network)	(4) Achievement of common objectives Efficiency in implementation	(5) Effectiveness of the inter- municipal solution Fiscal equivalence	(6) Community participation in the network
Regional (Territory)	(7) Economic efficiency Effectiveness of the regional solution	(8) Regional governance Territorial equity Quality of life	(9) Democratic principles Accountability

Source: Elaborated by the authors.

As regards evaluation of the efficiency and impact of cooperation on the local scale, key work includes that of Kinto (2009), who examined the efficiency of municipal administrative spending related to participation in associations, and that of Machado and Andrade (2014) and Dos Santos and Giovanella (2016), who indirectly describe local impacts, drawing attention to differences between localities in access to the benefits associated with IC and asymmetries between the participating municipalities. An interesting line of research in the region would be the analysis of the relationship between participation in cooperation and municipal innovation, which is a common theme in the international literature (Ahuja, 2000; Bell, 2005; Powell, Koput, & Smith-doerr, 1996).

The studies reviewed relate the legitimacy of a municipality's participation in collaborative agreements in the eyes of local citizens with the electoral results of mayors who participate in these agreements (Ferracini, 2013; Montero et al., 2006; Piterman et al., 2016). In this context, the studies draw attention to a difficult choice faced by mayors who engage in cooperation. Their dilemma is that they could legitimize their participation in the cooperation by publicizing its impacts in their community but, by doing so, would lose the opportunity to boost their election chances by claiming the results as a product of their own management. A greater understanding of this dilemma and its implications for the legitimacy of the IC is fundamental in contexts like Latin America where the figure of the mayor still has *caudillista* connotations (Montecinos, 2005; Nickson, 2016).

Moving to the inter-municipal scale, the literature reviewed examines fulfillment of objectives and reduction of service costs for the set of participants in cases of the collective implementation of a program (Do Amaral & Blatt, 2011; Safford, 2010). A line of future research could evaluate whether

^{*} Indicates research gap.

cooperative arrangements lead to greater efficiency and effectiveness than other forms of service provision, examining objective and/or subjective dimensions as proposed by Emerson and Nabatchi (2015) and Jordan, Brooms, Yusuf, and Mahar (2015).

Studies to assess the final results of collaboration and positive impacts on the target population refer mostly to areas of public policy such as citizen security, (Salazar et al., 2011), tourism (Pereira et al., & Pittock, 2009) and management of water resources (Montero et al., 2006). These studies conclude, at least implicitly, that collaboration has positive effects. However, some studies found levels of effectiveness that were lower than hoped for (Prosenewicz & Lippi, 2012) while others question collaboration on the grounds of a low capacity to balance local governments fiscally and overcome initial inequities. Despite the proliferation of studies in this area, few explicitly measure effectiveness. Here, future research could look for support to the abundant international literature on the effectiveness of collaboration (Provan & Milward, 1995; Turrini, Cristofoli, Frosini, & Nasi, 2010).

In the case of the legitimacy of collaboration at the inter-municipal scale, there are case studies in which IC appears with a higher social validation than other ways of resolving public problems (Matos & Dias, 2011) as well as cases that show the difficulties of incorporating mechanisms of participation and transparency that permit fluid interaction with the community (Abrucio et al., 2013; Brito e Silva & Bezerra, 2011; Filippim & Abrucio, 2016; Galindo et al., 2014; Matos & Dias, 2011).

At the regional scale, in order to evaluate the consequences of cooperation, it is necessary to consider the capacity of the configuration of relations to provide governance for the territory in question. In the case of the economic efficiency and effectiveness of the collaborative solution of problems, some exploratory studies examine the capacity of collaborative arrangements to solve metropolitan problems that, by their very nature, go beyond the local scale and affect the region as a whole (Da Silva & Ceccon, 2011; Suzuki & Gomes, 2009). Along with this, comparison of cooperative arrangements and centralized solutions to regional problems in terms of their efficiency and effectiveness is an area of research that would enrich the literature on metropolitan areas (Sellers, 2008).

In the case of the effectiveness of collaborative arrangements in the functioning, equity and quality of life of the territory's population, there is a gap in regional research. One strategy to address this gap would be through dialogue with the literature on regional and metropolitan governance as a source of criteria for the evaluation of effectiveness.

Another area where little research has been undertaken is evaluation of the legitimacy of collaborative arrangements as regards their alignment with democratic principles such as participation, responsiveness and accountability. One exception is the study of Lacerda and Ribeiro (2014), who assert that cooperative arrangements do not suffice to build a true political space. Here, studies on Latin America can benefit from the international literature which has shown particular interest in accountability mechanisms and has revealed the procedural and institutional complexities of these arrangements in which the fragmentation of roles and responsibilities makes the operation of traditional mechanisms of control and accountability more difficult (Hill & Hupe, 2002; Newman, 2004).

Overall, the review of research on the effects and consequences of IC in Latin America shows a concentration on evaluation of its efficiency and effectiveness. Less work has been undertaken on the evaluation of its effects and legitimacy, either at the local, inter-municipal or regional level. It

should be borne in mind that evaluation of IC will not necessarily be consistent at different scales and, in other words, its impacts for a municipality will not necessarily be in the same direction as the impacts for the collaborative regime or the region as a whole. This suggests an opportunity for more comprehensive research supported by multi-scale methods through which to test the impact of collaboration at the local, inter-municipal or regional level.

5. CONCLUSIONS

The review of the literature presented here analyzed a selection of 47 articles from the main current about IC in Latin America. Its results provide a picture of the main findings about the causes, operation and effects of IC as studied in different contexts around the region. In addition, it identifies research questions for exploration in future work to gain a deeper understanding of the phenomenon.

One aspect that stands out as a result of the systematic search of the indexed Latin American literature on IC is the high level of scientific production of countries like Brazil and Mexico and, at the same time, the absence of indexed work on the subject for a significant group of countries. This represents a limitation for the present study's ability to reach conclusions about the common determinants of IC in the region as a whole.

In addition, the wide range of journals in which the work was published and a lack of cross-references indicate that there is little dialogue between researchers and their results. Consequently, accumulation of knowledge about the phenomenon is still incipient, hampering any theoretical development on cooperation among Latin American municipalities. In this context, it is especially important to build bridges between Latin American studies as well as between these and the literature that, in recent years, has proliferated in the rest of the world.

In this dialogue with international literature, it is necessary to bear in mind the particular characteristics of Latin American local government, which give the phenomenon its own dynamics. One example of this is the dilemma faced by mayors who engage in cooperation, a dilemma that has its origins in the political and social characteristics of the region. Latin America has a number of specificities that suggest the need for a particular theoretical development for lines of research on the causes, operation and effects of IC. This challenge is a key to a future of better understanding and development of IC in Latin America.

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Karina Arias Yurisch



https://orcid.org/0000-0001-9820-6581

Ph.D in Public Administration and Policy, Florida State University; Lecturer at the Department of Management and Public Policy, Universidad de Santiago de Chile. E-mail: karina.arias@usach.cl

Karina Retamal Soto



https://orcid.org/0000-0001-8663-6744

PhD in Sociology and Anthropology, Universidad Complutense de Madrid; Researcher at the Universidad de Santiago de Chile. E-mail: karina.retamal@usach.cl

Camila Ramos Fuenzalida



https://orcid.org/0000-0002-7974-4891

Master in Management and Public Policy, Universidad de Chile; Researcher at the Universidad de Santiago de Chile. E-mail: camila.ramos@usach.cl