

Female empowerment and community-based productive associations: A systematic literature review

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Abstract

Albeit its long trajectory on social sciences and gender studies, female empowerment promotion has gained a renewed protagonism because of its inclusion on the Millenium Development Goals and the Sustainable Development Goals. Among prioritized strategies to achieve this empowerment, international agencies and national governments have focused on generating associative processes around productive activities. This study presents a systematic literature review to analyze the impact of community-based productive rural association's membership over different dimensions of female empowerment: resources, agency, and results. Then, a systematic literature review of five quantitative studies and eight qualitative studies is carried on. The analysis is organized according to each dimension of the empowerment process. In quantitative papers, the standardized size effects are estimated; a content analysis is made for qualitative papers. Results show that impacts of belonging to productive associations have been studied mostly from the empowerment approach as agency -decision-making process-, and for this specific dimension, size effects are statistically significant but small ($\delta=0,05; 0,22$).

Keywords: female empowerment, agency, rural associations, PRISMA.

Empoderamiento femenino y asociaciones productivas comunitarias: Una revisión sistemática de literatura

Resumen

Pese a estar presente en diversas discusiones de las ciencias sociales y los estudios de género la promoción del empoderamiento femenino ha alcanzado un renovado protagonismo a partir de su inclusión en los Objetivos de Desarrollo del Milenio y de Desarrollo Sostenible. Dentro de las estrategias priorizadas para lograr este empoderamiento las agencias internacionales y gobierno nacionales han apostado por la generación de procesos asociativos en torno a actividades productivas. En este documento se presenta una revisión sistemática de literatura que tiene por objetivo analizar el impacto de pertenecer a asociaciones productivas rurales en las diferentes dimensiones del proceso de empoderamiento, a saber: recursos, agencia y resultados. Con este fin, se utiliza una metodología de revisión sistemática de literatura de cinco artículos cuantitativos y ocho artículos cualitativos. Para el caso de los cuantitativos, se presenta una organización basada en el componente del

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proceso de empoderamiento evaluado y se estima el tamaño del efecto estandarizado; para el caso de los cualitativos, se realiza un análisis de contenido de los hallazgos siguiendo la misma organización por dimensiones del proceso. Los resultados muestran que el impacto de la pertenencia a cooperativas ha sido estudiado de forma mayoritaria desde el enfoque de empoderamiento como agencia, entendida como toma de decisiones; y que, para este componente en particular, los tamaños de los efectos (d de Cohen) son significativos, aunque pequeños ($\delta=0,05; 0,22$).

Palabras clave: empoderamiento femenino, agencia, asociaciones rurales, PRISMA.

Introduction

Various international organizations and programs to promote female economic empowerment, especially that of rural women, have focused on promoting organizations where, through collective action around a remunerated economic activity, women gain autonomy while building social capital (Kabere & Huq, 2010). Among the most popular intervention strategies are the so-called Self-Help Groups –SGH– and different associative forms, including producer cooperatives.

In the SGHs, women initially save in small groups. They access financial credits, training, local and international cooperation, and from this collective growth, they get involved in different political, social, and economic activities with a view to their empowerment (Brody et al., 2017).

The SGH strategy has been very popular in South and Southeast Asia, particularly in India, where these groups work in areas ranging from public health campaigns to consumer associations. In an extensive meta-analysis (23 quantitative and 11 qualitative evaluations), Brody et al. (2017) found that SGH have positive effects (0.06 - 0.41 Standardized Difference of Means –SDM–) on the economic and political empowerment of women as a result of the access to resources and training, exposure to discussions on financial management, feelings of trust and solidarity in groups, incentives to develop a public voice, accumulation of social capital, among others. On the other hand, in the medium and long term, it was found that the increase in autonomy, because of participation in these groups, could increase conflicts within homes and lead to greater expressions of domestic violence (Castiblanco & Raigosa, 2020).

Theoretically, SGHs are an initiative of the communities and are built under a “bottom-up” logic. Nonetheless, in practice, many of these initiatives are the result of interventions by international development organizations or microfinance institutions, such as the Grameen Bank (Brody et al., 2017). In contrast to this, in Latin America, a cooperative model

has prevailed, understood as an “autonomous association of people voluntarily united to satisfy their common economic, social and cultural needs and aspirations through a collectively owned and democratically controlled company” (Majurin, 2012, p. 2).

Unlike the SGHs, which seek to build social and economic capital, cooperatives start from the existence of these endowments. In this sense, what they offer to their members is the possibility of taking advantage of economies of scale, participating in collective property projects, accessing training and education, and working on tasks for the benefit of the community (Dohmworth & Liu, 2020).

Cooperatives enable the acquisition of capital goods for production, increase productivity and the possibilities of accessing financial services and markets, improve bargaining power (Othman et al., 2020; Saunders & Bromwich, 2012), allow the development of marketing strategies focused on the gender of the producers (Cuellar-Gomez, 2009), among others. These benefits allow female associates to increase their contributions to household income, be more valued in their communities and, based on collective organizing, overcome gender-based inequities and discrimination they face as individuals (Baden, 2013; Bastida et al., 2020; Food and Agriculture Organization of the United Nations -FAO-, 2012; Okechukwu & Agbodike, 2016).

Additionally, belonging to cooperatives improves the bargaining power of women in their family crops, helps them identify with roles different from the traditional gender (Cuellar-Gomez, 2009), provides spaces for women to develop a sense of collective identity and trust, allows them to establish sources of security outside of marriage and challenge the perceptions of their communities regarding gender (Manzanera-Ruiz & Lizarraga, 2016).

However, these two empowerment promotion strategies are not without criticism. Regarding SGHs, Batliwala (2010) points out that these groups have been co-opted by microfinance institutions aimed at promoting the financial and entrepreneurship component, excluding conversations

about social norms and the effective transformation of oppressive conditions and subordination of women. In this way, SGHs would create “empowering situations” but would not generate “situations of empowerment”¹ (Rowlands, 1997).

In the case of cooperatives, the main criticism focuses on the issue of participation. As Cuellar-Gómez (2009) points out, most cooperatives establish entry criteria that imply owning a certain amount of land or productive resources, which can exclude the poorest and most vulnerable women from the cooperative scheme (Duguid & Weber, 2016). In addition, women must face the existence of triple working hours—care, cultivation, cooperative work— (Lyon et al., 2017) and the lack of possibilities for participation in management bodies and decision-making in cooperatives due to gender discrimination, lack of leadership training, low educational levels, and low self-confidence (Duguid & Weber, 2016; Montanari & Bergh, 2019; Tanwir & Safdar, 2013).

Despite its growing importance, there is little research on the relationship between empowerment and association with productive cooperatives that sheds light on the magnitude of the impacts of membership, the dimensions of the empowerment process that it affects, and the characteristics of the associations that increase—or reduce—the potential effects of a community association.

Consequently, this research analyzes the scientific literature that studies the effects on female empowerment of women belonging to agricultural cooperatives. Thus, they are posed as guiding questions: What is the behavior of the academic literature on the subject? What are the standardized impacts of association membership on empowerment? In what indicators and dimensions are these impacts evident? Moreover, what are the characteristics of the associative processes that are most closely related to female empowerment? As a working hypothesis, it is proposed that associativity has low and medium effects on the resource and agency dimensions of the empowerment

process at the individual level with much smaller impacts at the collective level and the transformation of the social structures of oppression.

With this purpose, in the first place, a framework for the analysis of female empowerment is presented. Second, the method used to retrieve and analyze the documents is described. Thirdly, the results are presented, which include a bibliometric characterization of the academic production on the subject, an estimate of the standardized effect sizes reported by the quantitative evaluations retrieved, and an analysis of these results in light of the findings of qualitative works. Finally, the implications of the analysis are discussed.

Female empowerment as a category of analysis

The concept of empowerment has a long tradition in the social sciences. Since its appearance in the 1970s, within the framework of civil rights demand movements, the term has been used to refer to the acquisition of power by the most marginalized population groups to change their state of oppression and subordination.

In the earliest definitions of empowerment, Zimmerman (1990, 1995) argues that it should be understood as the “process by which people, organizations, and communities gain mastery over issues that concern them” (1995, p. 581). Thus, this psychological empowerment is the result of a process of “learned hope”, understood as the process of learning and using the skills acquired for solving problems and achieving some degree of control over them and their immediate environment, be it real control or just perceived. Besides, in this framework, community participation or involvement in organizations has a significant and positive effect on psychological empowerment.

Returning to this vision, Jo Rowlands (1995, 1997) understands empowerment as the exercise of a “power to”. In other words, it implies involving those who are outside of it in the decision-making process, it means maximizing the available opportunities and reducing the restrictions that prevent people from accessing them. In this way, empowerment operates in three interrelated dimensions: personal—trust to reverse the effects of internalized oppression—, relational—ability to negotiate and influence the nature of a relationship and the decisions made within its framework—, and collective.

Thus, Rowlands (1997) considers empowerment as a multidimensional process, transversal to the different

¹ “A situation of empowerment is where all four conditions [of empowerment] are met: [a] become aware of the power dynamics at work in their life context, b) develop the skills and capacity for gaining some reasonable control over their lives, c) exercise this control without infringing upon the rights of others], and “an empowering situation” is where one or more of the conditions is in place or being developed, but where the full requirements are not present.” (Rowlands, 1997, p. 15).

spheres where individuals act —psychological, political, social, and cultural— and through which traditionally marginalized and oppressed groups acquire the capacity to control their lives. In this framework, the idea of female empowerment takes effect by pointing out the conditions of oppression and subordination in which women live and the need to transform these conditions through the expansion of women's agency (Cornwall, 2016).

From a psychological point of view, Muñoz-Márquez et al. (2021) point out that assertiveness, self-esteem, autonomy, and sense of control are components of empowerment. Authors consider, based on feminist theories, that empowerment implies the ability to express feelings and opinions, reject requests, and defend rights. Also, to be empowered would mean considering events as a result of own behaviors and choices, having a positive perception about oneself, and being aware of own opinions, desires, and needs as well as being capable of expressing them.

In addition to the elements previously described, the concept of agency has recently positioned itself as a central element in the female empowerment process. Agency capacity is defined as what a person is free to do and achieve to pursue the objectives that she considers important. That is, the ability to convert potential capabilities into successful performances. In this sense, agency implies having the ability to choose, considering that the decision-making process is interactional and not just individual (Sen, 2000). Thus, individuals are the central actors in the choice process

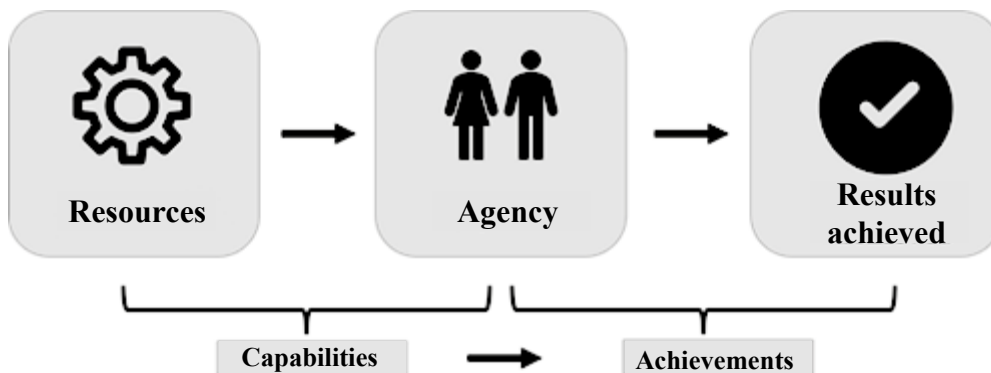
by contributing to their motivation and action in a system where personal, behavioral, and environmental determinants affect behavior (Bandura, 1989; 2018).

Based on the above, female empowerment can be defined as the process by which those who had been denied the ability to make strategic life decisions acquire that ability. Therefore, empowerment implies a process of change (Kabeer, 1999). In Kabeer's definition, there are three central elements: empowerment is a process, it is a skill, and it implies its acquisition (that is, an active role of the subject).

Consequently, empowerment is, first, a process of acquiring the ability to make strategic life decisions. For Kabeer (1999, 2018), this ability is acquired from controlling resources that allow women to develop their sense of agency. However, the historical subordination and oppression of women has restricted the exercise of their choice and has limited the set of options from which to choose. In this way, women must access these resources that have been denied them and use them to improve their conditions of choice.

Second, the ability to choose incorporates three inter-related dimensions, as indicated in Figure 1: Resources —not only as current access but as the possibility of making future demands on human, material, and social resources—, agency —which includes decision-making processes, as well as less quantifiable manifestations such as the ability to negotiate— and achievements —which are expressed in the well-being of who is empowered— (Kabeer, 1999).

Figure 1
Dimensions of ability to choose. Empowerment process



Note. Taken from Kabeer (2018, p. 1).

Resources include those materials and human and social ones that serve to improve the ability to choose. These resources are acquired through multiple social relationships in various institutional contexts and reflect the rules and norms that determine the principles of institutional distribution and exchange (Kabeer, 1999).

Agency, in this proposal, refers to the ability to make strategic decisions and control the resources and decisions that affect their lives. Agency involves the sense, motivation, and purpose that individuals print in their actions.

Finally, the relationship between resources and agency constitutes what Sen (2000) calls capacities, which give rise to results (operations), such as: “the potential of people to live the life they want, to achieve valued ways of ‘be and do’” (Kabeer, 1999, p. 438).

Considering this last definition of empowerment as a multidimensional process, the following sections present and analyze the systematic literature review results on the effects of membership in agricultural cooperatives on female empowerment.

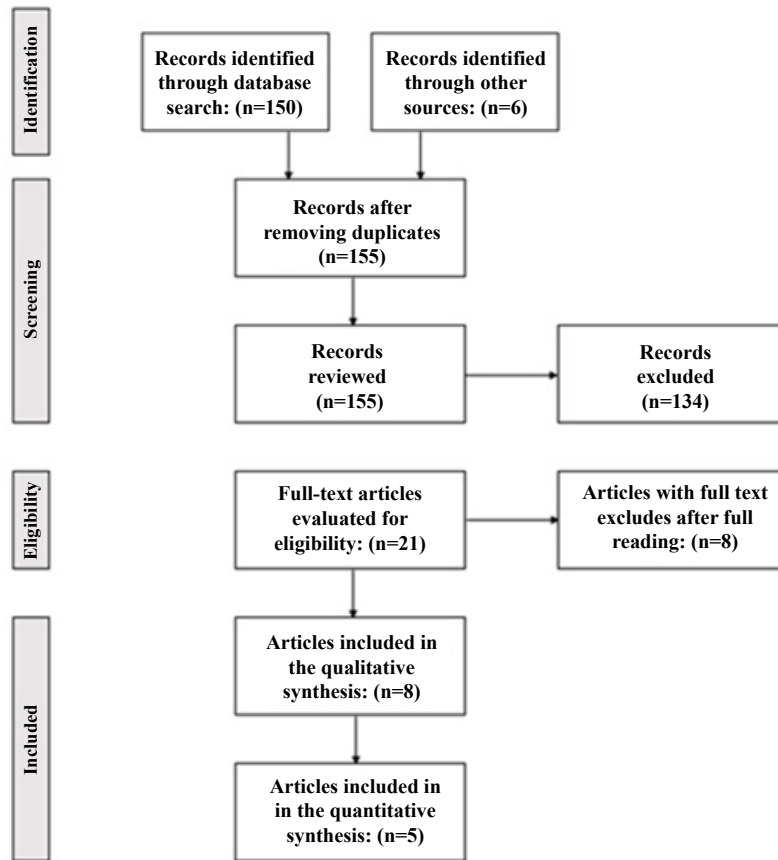
Method

Type of study

Systematic reviews are defined by Whittemore et al. (2014) as a method of combining evidence from various studies to identify relevant research, assess the quality of the research, and summarize the findings. These reviews follow a standardized process of compiling, synthesizing,

Figure 2

PRISMA flow chart for reporting the results of a systematic literature review



Note. The search was carried out in the Scopus® and Scielo® databases using different Boolean equations built following the PICOS methodology (Population, Independent Variable, Control, Result variable, Type of Study), the keywords were standardized using the thesaurus of the UNESCO and the HASSET thesaurus for social and human sciences. Additional articles were retrieved using backward and forward searches. Information retrieved with cutoff October 3, 2020.

and reporting the results and include statistical and narrative syntheses, as in this case. Figure 2 presents the PRISMA diagram (Preferred Reporting Items for Systematic Reviews and Meta-Analyzes) used to guarantee standardization in the results obtained.

Inclusion criteria

Experimental and non-experimental studies evaluating the impact, effect, or consequence on female empowerment of belonging to a rural association were included. Only groups whose initial purpose was the production, commercialization, or internationalization of some agricultural product or service were included. In that sense, political associations were excluded. That quantitative studies, only studies with a control group that reported all the statistical tests carried out were included. In the case of qualitative studies, it was preferred that they include testimonies from the women interviewed and explicitly evaluated some of the dimensions of female empowerment: resources, agency, or results.

Search strategy

To carry out the search, the PICOS strategy was followed for the construction of search equations. The keywords used in the equations were standardized using specialized thesauri in social sciences, namely: UNESCO and HASSET. The search was carried out in the Scopus® databases, which capture a wide range of the journals with the greatest scientific impact worldwide, and in the Scielo® database to capture information produced in Latin America in journals not indexed in Scopus®. The search was restricted to the

Spanish and English languages, and the year 1995 was used as the cut-off point, the year of the Beijing declaration in which the term empowerment first appeared in an official document of the United Nations Organization. Table 1 presents the search equations and the results.

Analysis

The statistical synthesis of results was made by estimating the effect size for each of the quantitative studies analyzed. Considering that most of them used Propensity Score Matching techniques—PSM—since not all measured female empowerment using the same scale, the standardized mean difference was used as a measure of effect size, which is defined for independent groups by Borenstein et al. (2009, p. 228) as:

$$\delta = \frac{\bar{X}_1 - \bar{X}_2}{S_{between\ groups}}$$

The calculation was carried out using the Psychometric tool (Lenhard & Lenhard, 2016). Finally, to graph the forest plots that visualize the results of the statistical synthesis, the “metaviz” library available in the statistical software R v.1.3.1093 (Kossmeier et al., 2020) was used. Due to the high variability in the indicators used to measure empowerment, it was impossible to assess the results’ heterogeneity.

The narrative synthesis followed the methodology proposed by Brody et al. (2017) based on a double reading of the studies, emphasizing the themes, citations, and interpretations of the authors of the citations.

Table 1
Boolean search equations, query databases and results obtained

Database	Ecuation	Results
Scopus	(TITLE-ABS-KEY (("Women" OR "Female" OR "Rural Women")) AND TITLE-ABS-KEY (("Rural Associations" OR "Women's Associations" OR "Women's Organizations" OR "Female Organizations" OR "Agricultural Cooperatives" AND NOT "politic*")) AND TITLE-ABS-KEY (("empowerment" OR "agency" OR "autonomy" OR "decision making"))) AND DOCTYPE (ar) AND PUBYEAR > 1994 AND (LIMIT-TO (LANGUAGE , "English") OR LIMIT-TO (LANGUAGE , "Spanish"))	140
Scielo	("Mujeres" OR "Femenino" OR "Género" OR "Mujer rural") AND ("Asociaciones rurales" OR "Asociaciones de mujeres" OR "Organizaciones de mujeres" OR "organizaciones femeninas" OR "Cooperativas") AND ("empoderamiento" OR "Agencia" OR "Autonomía" OR "Toma de decisiones")	10

Results

As a result of the process described, thirteen (13) documents were analyzed that evaluate the impact of membership in agricultural production or marketing associations on female empowerment. In this section, a brief bibliometric characterization of the recovered works is presented; included studies are described, and the results of those studies are analyzed.

Bibliometric characterization of the research

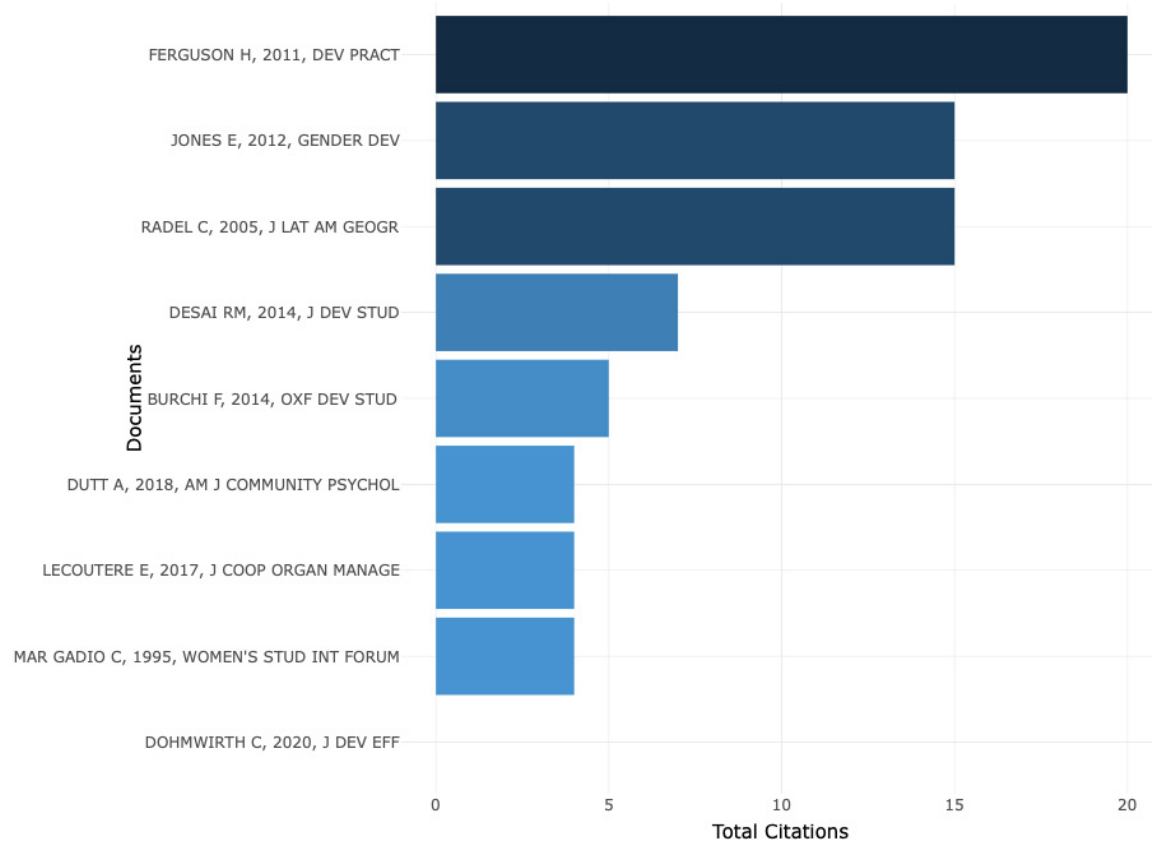
To characterize the academic production on association membership and empowerment, the Bibliometrix tool (Aria & Cuccurullo, 2017) was used, which allows the bibliometric analysis of information from various databases, including Scopus.

In the first place, it should be noted that academic production is relatively recent, and despite the inclusion of a

25-year time horizon, only three of the documents recovered were published more than ten years ago (Chiappe-Hernández, 2006; Mar Gadio & Rakowski, 1995; Radel, 2005). The remaining documents were published after 2010, with the years 2014 and 2018 with two documents each. Figure 3 presents the citation dynamics of the documents included in this review.

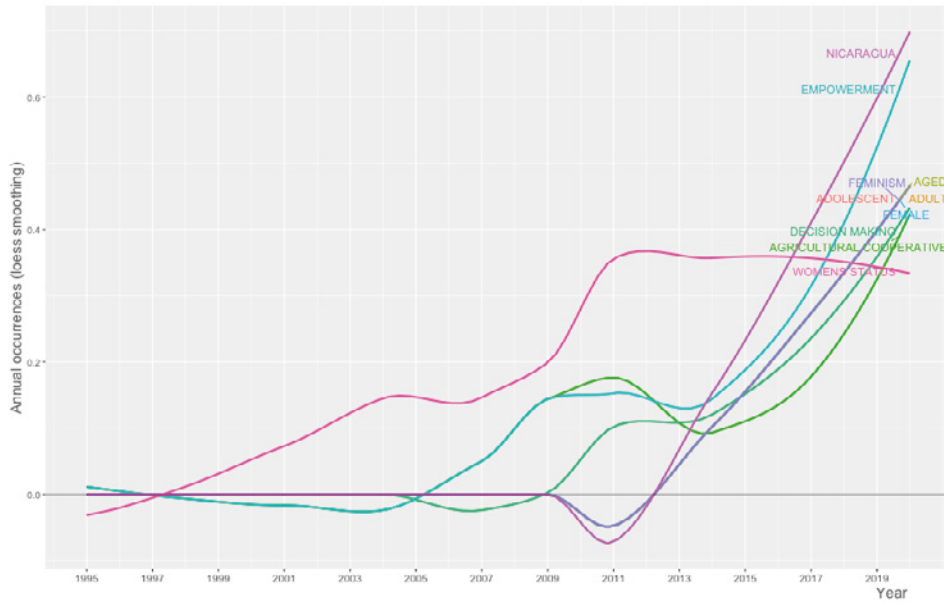
On the other hand, the trend in the behavior of the keywords associated with the retrieved articles, described in Figure 4, provides information on the topics associated with empowerment and agricultural cooperatives. It is striking that the words with the greatest appearance in the descriptors, in addition to empowerment, are those related to the population participating in the different studies — Nicaragua, woman, feminism, adult, adolescent—; this, in contrast to other keywords that traditionally characterize the global empowerment literature, such as status of women.

Figure 3
Citation of each document included in the systematic review



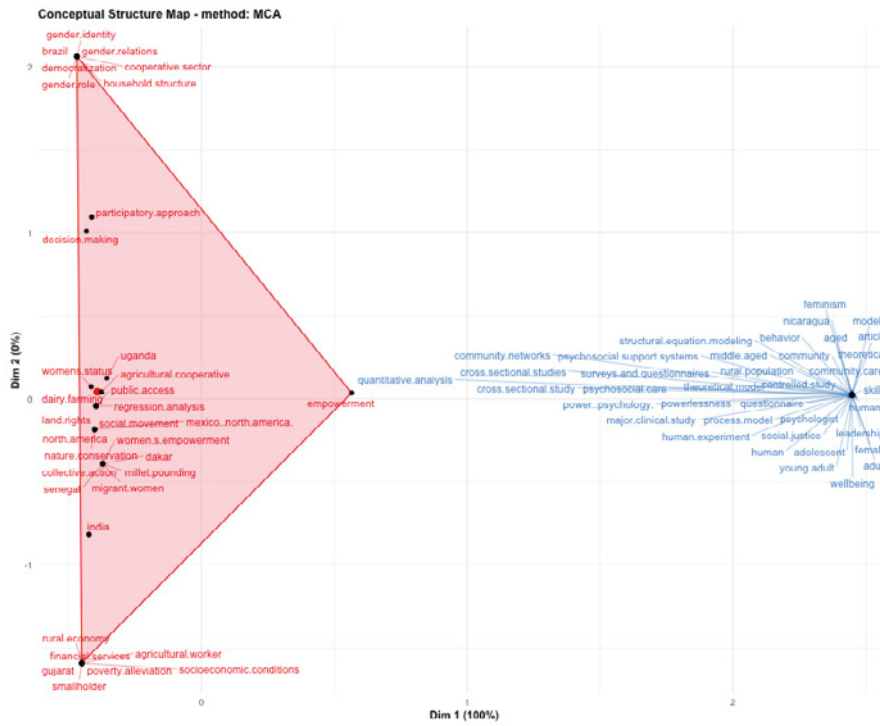
Note. The information analyzed only corresponds to the articles retrieved from the Scopus® platform.

Figure 4
Historical trend of appearance of keywords —keywords plus—.



Note. The information analyzed only corresponds to the articles retrieved from the Scopus® platform.

Figure 5
Multiple correspondence analysis based on authors' keywords



Note. The information analyzed only corresponds to the articles retrieved from the Scopus® platform.

This trend is confirmed in the conceptual structure resulting from the analysis of the documents. Figure 5 shows four groupings of themes addressed in the analyzed articles. In the first place, the network that analyzes gender identity and social roles in the cooperative sector is located. Second, work on the participatory approach and decision-making. Third, the densest group, on the empowerment of women and the associations studied. Moreover, finally, the associations' characteristics were analyzed, emphasizing the rural element that is transversal to all the cases analyzed.

Description of included studies

Table 2 summarizes the quantitative articles included in the study. All these articles use a comparison technique between participants of a control group, members of an association, and a treatment group, not members of an association; except the study by Dohmworth and Liu (2020) that uses three comparison groups: members of a cooperative of only women, members of a mixed cooperative and not members of any cooperative.

On the other hand, all the studies used cross-sectional data, with which the impact evaluations resorted to evaluation

Table 2
Synthesis of quantitative articles included

Study	Association name	Location	Variable Result	Sample	Analysis method
Burchi & Vicari (2014)	Coppalj	Brasil	Four domains: household expenses, health, children's education, and respondents' jobs. Logarithm of total income Logarithm of farm income Logarithm of nonfarm income	T: 29h y 34 m. C: 21h y 63 m.	Propensity Score Matching
Desai & Joshi (2014)	SEWA	India	Knowledge of credit options Have you ever taken a credit Has a bank account Amount of land harvested Fraction of the crop sold Knowledge of product price before sale	T: 747 C: 735	Multiple Linear Regression Propensity Score Matching
Dohmworth & Liu (2020)	Not specified	India	Five daily production decisions and seven spending decisions Leadership skills Sense of community	T: 112 female-only cooperative members C: 110 mixed cooperative members	Propensity Score Matching
Dutt (2018)	Xochilt Acalt Women's Center	Nicaragua	Sociopolitical powerlessness Empathy Orientation towards solidarity Economic wellness	T: 149 C: 149	Propensity Score Matching
Lecouture (2017)	Popular Knowledge Women's Initiative - P'KWI	Uganda	Housing diversification Adoption of good practices Social networks Perception of the evolution in power and ability to influence household decisions.	T: 107m y 69h C: 39m y 29h	Differences in differences

Note. In the sample column, the T refers to the treatment population —members of cooperatives— and the C to the control population —no members—.

techniques that can be implemented without the need for a baseline but from the comparison of the means of continuous variables (Likert scale) between paired samples.

Regarding the qualitative work, these accounted for most of the recovered documents. They are characterized for the most part by resorting to comparative case study techniques based

on interviews, focus groups, and documents from cooperatives. As in the quantitative studies, only those investigations that analyzed examples of producer or marketing cooperatives were included, which, as previously indicated, have been little investigated in the literature on female empowerment. Table 3 describes the articles included in the review.

Table 3
Synthesis of qualitative articles included

Study	Association name	Location	Analysis Category	Sample	Analysis method
Chi-appe-Hernández (2006)	Association of Rural Women of Uruguay	Uruguay	Associativity and individual and collective empowerment. Construction of autonomy and gender. Positioning in the family and public sphere. Local knowledge, traditional production, and professionalization. Business links Social benefits	190 groups in 19 departments.	Systematization of interviews, documents, and workshops.
Ferguson & Kepe (2011)	The Manyakabi Area Cooperative Enterprise	Uganda	Sense of empowerment Business knowledge Cooperation, problem solving and leadership skills Positive spillover effects Understanding the risk Cooperative history	20 women and 5 men belonging to nine groups of farmers attached to the cooperative.	Content analysis of semi-structured interviews, focus groups, observations, and informal conversations.
Hernández et al (2018)	Cepira Miel Health and surgical instruments Floresta	Mexico	Personal qualities Gender elements associated with the cooperative Training contribution	3 women from different cooperatives.	Case study
Jones et al (2012)	Barka Women's Group Turkana Women's Group Mathima Women's Group Tusifé Moyo Women's Group Wawata Njombe Kazinga Basket Makers Patience Pays Initiative Artisans Association SABALA Sadhna Association for Craft Producers PRODECOOP Ya Munts'i B'ehn'a	Kenia Tanzania Uganda India Nepal Nicaragua Mexico	History in the organization Impact on their lives of participation in the organization	16 organizaciones	Action Research - Participatory

Study	Association name	Location	Analysis Category	Sample	Analysis method
Majurin (2012)	90 agricultural cooperatives in 3 countries	Kenia		320 surveys	
		Tanzania		39 interviews	
		Uganda		18 focus groups	
			Migration history		
Mar Gadio & Rakowski (1995)	Organization of migrant women millet pounders (Millet pounders)	Senegal	History of beginning in the productive activity	20 semi-structured interviews with female associates.	
			Everyday life in the organization		
			Future prospects		
Radel (2005)	Ejidos: Valentín Gómez Farias Ricardo Payro Cristóbal Colón Municipal Association of Rural Women of Sibaté -AMUC-	Mexico	Gender relations and land ownership	Interviews with the main female adult from 100 randomly chosen households.	
			Decision making		
			Agricultural participation		
Suárez et al (2018)	Municipal Association of Rural Women of Sopó -AMUC Sopó- Sumapaz Life and Peace Rural Producers Network	Colombia	Empowerment of rural women	Semi-structured interviews with 9 women	

Impact of membership in grassroots organizations on empowerment

For the description of the statistical and narrative synthesis of the results of the analyzed articles, two sections are presented. First, the documents that study empowerment from the agency approach are analyzed; that is, the decision-making process. Secondly, the group of works that try to approach empowerment from a broader sense is shown, involving the resources that make the election process and its results possible, among which awareness and community empowerment could be included.

Agency

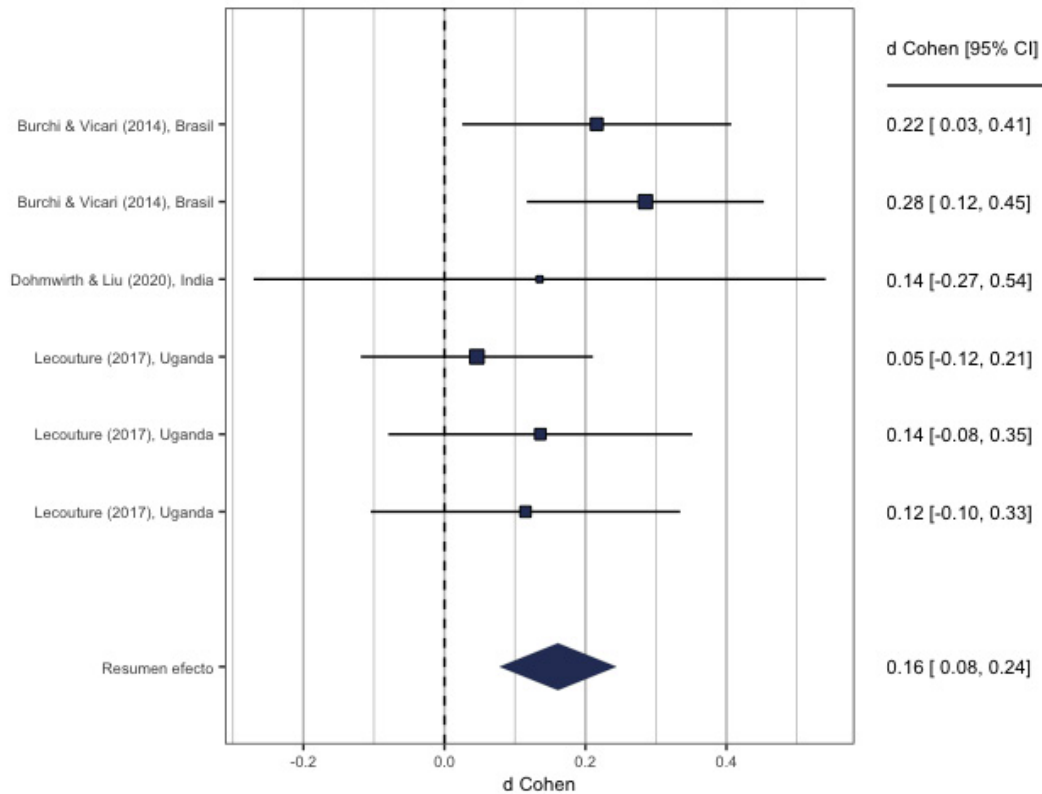
Agency, and its relationship with cooperative membership, has been captured in two ways, asking women how capable they are of making certain decisions in their personal, family, and collective life (Burchi & Vicari, 2014; Dohmwirth & Liu, 2020; Lecoutere, 2017); and, through bargaining power (Jones et al., 2012). Regarding the first type of studies, women indicate a greater capacity to influence decisions about daily purchases, large purchases, and family expenses, as indicated in Figure 6.

However, the results regarding strategic decision-making, such as the administration of own resources, are less conclusive. Radel (2005) evidence for the Mexican case that women members of Community-Based Organizations (CBOs) have a low incidence on key issues such as what should be planted on the land they own or how much should be planted—only 27% of women make this decision—. In contrast, 58% of women decide how much and how to spend their income.

Faced with the bargaining power, women report an increase in their status in the family and the community, greater respect, more equitable distribution of paid and unpaid work, and, because of this, greater influence on decision-making in the family and the community (Chiappe-Hernández, 2006; Ferguson & Kepe, 2011; Jones et al., 2012; Majurin, 2012). Likewise, membership in the cooperative increases access to information through training, generates greater support in commercial terms, and leads to better decisions about whom to sell to, at what price, and when (Hernández Herrera et al., 2018; Jones et al. al., 2012).

Figure 6

Synthesis of the effect of the quantitative articles that evaluated the dimension "Agency -Decision-making-" of the empowerment process



Resources

To catalyze the empowerment process, before joining cooperatives, it is necessary to have a structure that promotes women's membership in these organized structures. Although there are studies that analyze the characteristics of women who are linked to cooperatives (Meier zu Selhausen, 2016; Radel, 2005), few of them study the social norms that affect this connection.

Majurin (2012) shows that, for the African case, there is a high inequality between men and women within cooperatives. Among the reasons identified for such differences are sociocultural barriers associated with traditional gender roles, inequity in the distribution of care tasks between men and women, inequity in access to control of resources, gender differences in employment patterns, legal obstacles—inheritance laws, land ownership—and lack of public policies that promote the participation of women in cooperatives.

However, on the effects of belonging to cooperatives on these social structures, Chiappe-Hernández (2006) points out that cooperatives that tend to carry out activities of a social and political nature generate positive effects on the gender beliefs of their associates. For example, the AMRU in Uruguay offers workshops aimed at promoting reflection on being a woman and rurality, the definitions of power, empowerment, and self-esteem. These workshops have shown the wide heterogeneity in the experiences of the women members of the associations and the need to consider these differences in the administration of these groups.

On the other hand, resources refer to the endowment of different capitals, namely: economic, social, political, and cultural, that an individual has and that, together with social norms, frame the set of options available to subjects. In this sense, productive associations arise in many cases with the purpose of increasing the endowment of one of

these capitals, the economic one (Desai & Joshi, 2014). However, as Chiappe-Hernández (2006) points out, women also get associated to socially legitimize themselves, strengthen their identity, reaffirm their autonomy, and exchange experiences.

Access to resources, especially economic ones, for joining cooperatives is crucial. Most of them, unlike SHGs, require their members to have a small capital to start. Mar Gadio and Rakowski (1995) show that, given the severe economic crisis that has hit Somalia since the late 1980s, many women have been forced to migrate from their villages to larger cities such as Dakar. Upon arriving there, if they wish to be part of the millet crusher cooperatives, they must first buy 20Kg of millet to start their micro-business (3.55USD) and, only when they manage to demonstrate their financial ability and capacity to pay a daily fee (0, 85USD), they can join the group. Belonging to the group provides them with financial capital—the resources contributed by all the members—, social security, a location in the area of the

city where millet is traditionally sold, access to collective housing, and security, among others.

Regarding the economic element, Jones et al. (2012) point out that women belonging to collectively owned companies increase their income, and with it, their living standards. This is because, among others, cooperatives can negotiate better sales prices, women can save more resources and diversify their sources of income, shared knowledge leads to technological improvements, and marketing strategies are increased (Desai & Joshi, 2014; Majurin, 2012). However, these income increases do not automatically translate into improvements in bargaining power, nor in business nor in the families, or improvements in markets, where in most cases, productivity is not accompanied by an increase in final prices of the marketed products.

Figure 7 shows the standardized effect sizes of the article by Desai and Joshi (2014) that analyzes three indicators of improvement in resources derived from membership

Figure 7

Synthesis of the effect of the quantitative articles that evaluated the “Resources” dimension of the empowerment process

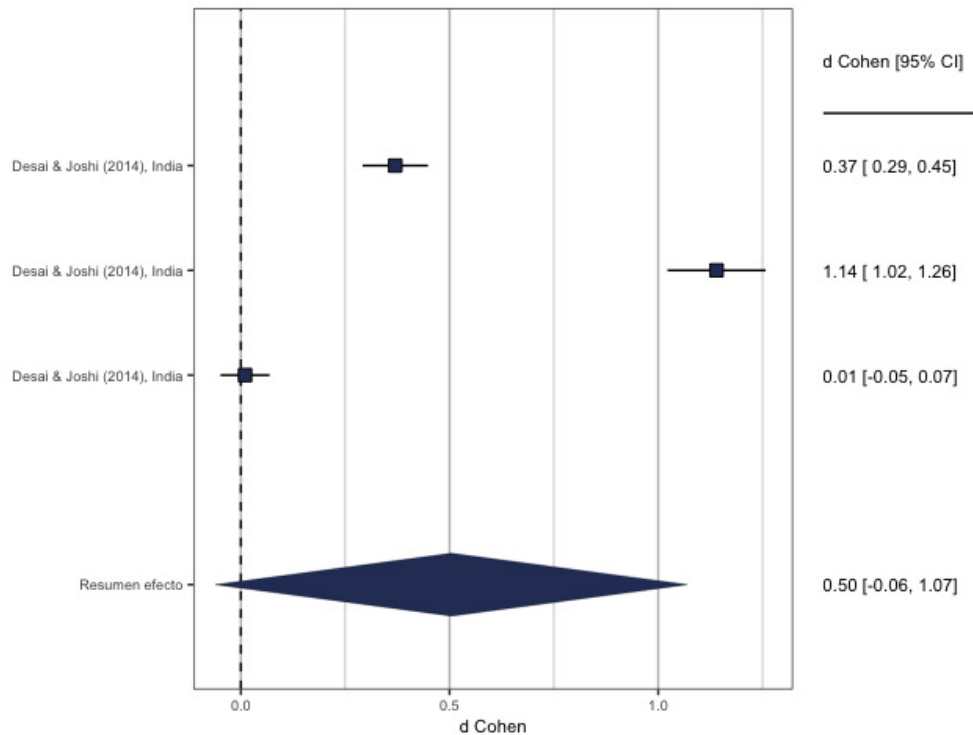
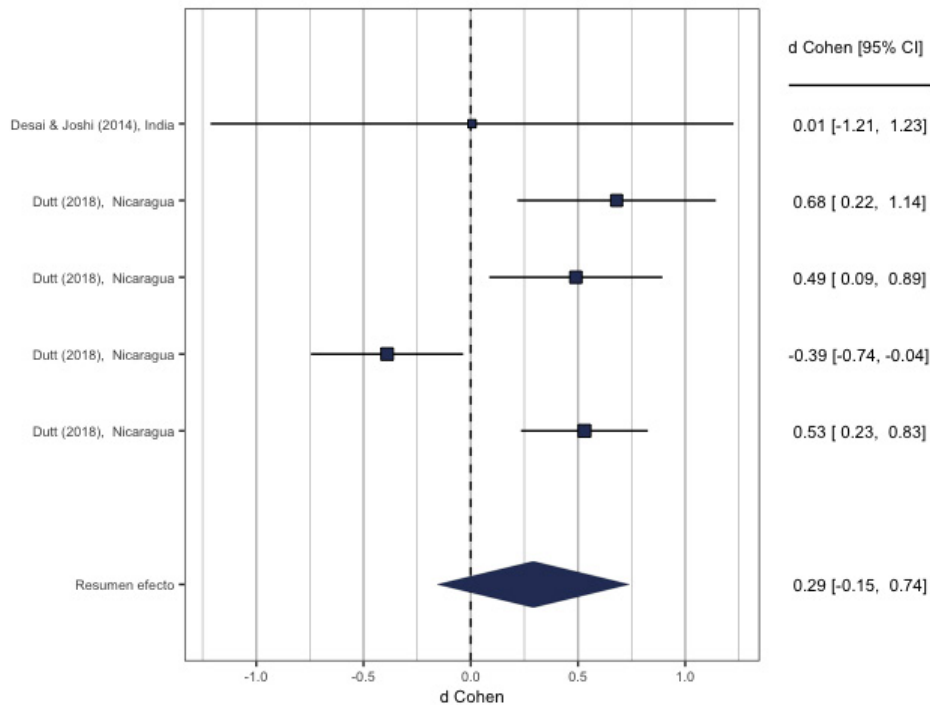


Figure 8

Synthesis of the effect of the quantitative articles that evaluated the dimension "Results" of the empowerment process



in cooperatives, namely: access to credit, knowledge of credit options, and account-holding bank. Effects are seen in the first two elements, intermediate (0.366 δ) and large (0.448 δ), respectively².

Results

Beyond the economic factor, women indicate greater independence and status, an increase in their capacities and abilities expressed in greater individual growth, new forms of relationships, and an improved self-perception as a result of collective action (Hernández Herrera et al., 2018; Jones et al., 2012; Mar Gadio & Rakowski, 1995). Likewise, many women indicate that joining associations

has allowed them to expand their participation in the public space, gain leadership and business skills and greater recognition in their communities, as can be seen in Figure 8 (Chiappe-Hernández, 2006; Dutt, 2018; Ferguson & Kepe, 2011; Suárez et al., 2018).

At the social level, Majurin (2012) shows that women indicated that belonging to cooperatives leads to an increase in the level of support received from their community and participation in it. The benefits of the cooperative model include greater access to seed capital and financial credits, a more democratic decision-making process, and greater support from international organizations.

Dutt (2018) shows that membership in associations encourages the development of leadership skills (0.68 δ), increases their ability to believe that they can transform their immediate environment (0.49 δ), reduces their feeling of powerlessness or political disempowerment (-0.39 δ) and encourages them to think about possibilities for larger-scale social change.

Finally, it should be noted that not all the results of belonging to cooperatives translate into benefits for women. Majurin (2012) summarized that for mixed cooperatives,

² The work of Desai and Joshi (2014) uses a Multiple Linear Regression data analysis technique for the analysis of these variables. As Lenhard and Lenhard (2016) point out, in these cases there are contrary positions on the relevance of transforming the standardized betas to correlations measured through Pearson's r and then estimating the effect size. Psychometrica uses a procedure that allows the betas to be transformed between -0.5 and 0.5; however, it suggests caution when interpreting the result.

benefits are not always equally distributed between men and women. Moreover, for women-only cooperatives, a deterioration in family relationships has been reported because of mistrust and improvement in the economic status of women. Similarly, since changes occur more rapidly at the economic level than at the level of social norms, women are overwhelmed with an exaggerated increase in their paid and no paid work in the early stages of membership (Suárez et al., 2018).

Discussion

In his career in the social sciences, empowerment has become a controversial concept. It is used by different agents, ranging from social movements that see it as a strategy to claim rights and a mechanism for social change to organizations and companies that see it as a process of self-confidence and self-determination of individuals to decide about their lives. These different meanings find their reason for being in the theoretical turns of the concept that has gone from being associated with the idea of liberation and community participation to a more individual notion focused on decision-making and its impacts.

Now, in this scenario, the linking of women to productive community spaces has become an important tool for promoting female empowerment by combining an income generation strategy with democratic processes of associativity that promote the participation of women in different spaces of the public sphere. However, evaluations of the effects on women's empowerment of women of their membership in these cooperatives are scarce (Brody et al., 2017).

In this sense, this research contributes with empirical evidence about how the effects of associativity on female empowerment have been evaluated, of what magnitude these effects are, and the mechanisms behind them. The findings indicate that women face strong socio-cultural barriers to belong to these associative structures. In principle, the lack of access and control of own resources, the distribution of care tasks, and social norms on the roles of men and women make it difficult for women to participate in cooperatives (Majurin, 2012). For example, in agricultural cooperatives, often only landowners can belong, and family land tends to be in the name of the husband, preventing women from joining these groups (Radel, 2005).

As a consequence of the above, a large group of women, among them the most vulnerable, are left out of these associative processes, experience a worsening of their living conditions in the short term, or are linked under circumstances that make their participation difficult. Therefore, the process of female empowerment and other benefits tend to be heterogeneous among female associates, and in the case of mixed cooperatives, between men and women (Chiappe-Hernández, 2006; Majurin, 2012; Suárez et al., 2018).

Now, regarding the agency, even when it refers to the ability to make strategic life decisions or influence the world in key elements autonomously; most of the studies reviewed analyze the agency only from two dimensions: decision-making and bargaining power. Regarding the first, cooperative membership shows positive results on the ability to decide on very specific issues; for example, purchases and daily expenses or minor elements on the administration of the land and the resources derived from it (Dohmwirth & Liu, 2020; Lecoutere, 2017; Radel, 2005). However, fewer studies analyze decisions of greater strategic importance, which go beyond women's practical, or survival needs (Burchi & Vicari, 2014; Mar Gadio & Rakowski, 1995).

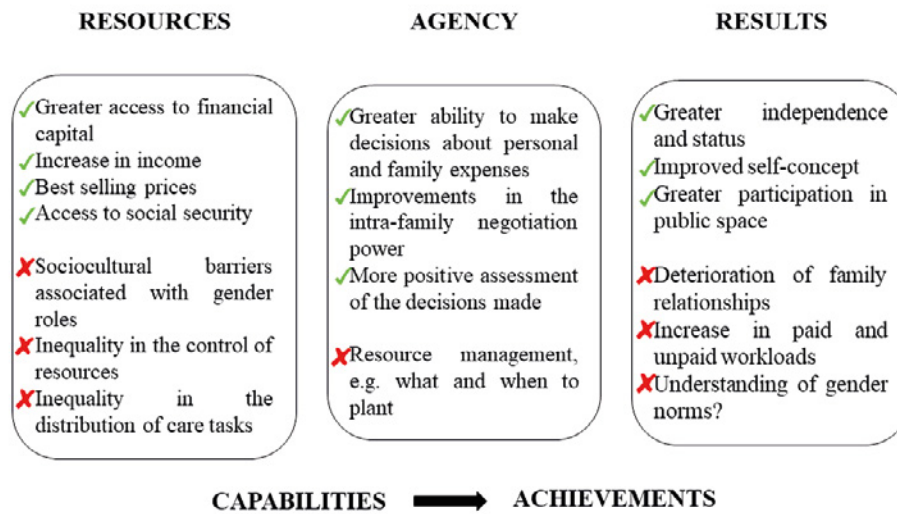
On the other hand, compared to the power of negotiation, this has been evaluated by questions about who has the last word in certain family or community life decisions. It was not possible to find quantitative studies that evaluated the impact of membership on this. However, different qualitative studies collect testimonies from women who state that they feel more included in decision-making processes, have greater respect for their opinions, and greater ability to express what they consider valuable for them (Chiappe-Hernández, 2006; Ferguson & Kepe, 2011; Jones et al., 2012).

Additionally, both qualitative and quantitative studies show an increase in associated women's self-confidence, self-esteem, and cognitive abilities. Regarding the last point, the increase in their income, the financial management of their production quota, and the commercialization through cooperatives positively impact the financial and marketing knowledge of the associated women. Likewise, to the extent that women feel more capable of making good decisions, they take more leadership and defend their decisions in the public and private spheres.

Another key element regarding the agency's expansion focuses on the fact that this process can lead to the exercise

Figure 9

Effects on the female empowerment process of membership in productive community associations.



of “power to”, which would constitute the “materialization” of empowerment. In this sense, Dutt (2018) identifies significant and intermediate effects on elements related to this exercise of “power to”. Among them, the improvement in leadership skills and the sense of community stand out and a decrease in the feeling of “political impotence”. These results would seem to indicate then that, coupled with the agency’s expansion, women experience greater interest in the social and political sphere and a greater commitment to a social transformation beyond the initial economic sphere that gives rise to cooperatives.

For illustrative purposes, Figure 9 synthesizes the positive and negative effects of membership in productive associations on the different dimensions of the empowerment process.

The advanced review evidences the need to increase the number of evaluations of cooperative membership on the empowerment of women so that it is possible to identify in greater detail the relationship between resources and agency within the framework of cooperative exercise. This implies a greater emphasis on understanding the social norms that come into play in the decision of women to join a cooperative, as well as an analysis of decision-making in really strategic dimensions of women’s lives that go beyond the purchases and daily expenses that, being linked to the traditional role of women as caregivers, have usually been in their hands.

Finally, it is important to point out that this study constitutes a first exploratory step to systematically analyze the existing evidence regarding the impact of cooperatives on the lives of women. In this sense, the results are subject to certain limitations. To point out the one that constitutes the greatest risk, only documents published in specialized journals were considered, which left aside the gray literature and reports from specialized entities. The inclusion of these documents and a search in greater detail in other specialized databases not considered here could significantly expand our knowledge about this type of associative structure and its potential benefits and risks.

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