Exploring supply chain sustainability research in Latin America

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Abstract

Purpose – The majority of the supply chain sustainability (SCS) literature is based on research perspectives and findings from studies conducted in developed countries. The purpose of this paper is to analyse the current Latin American publications on SCS (2007–2016) to explore whether another perspective exists.

Design/methodology/approach – As part of a structured literature review, 123 peer-reviewed articles published in four Latin American databases were scanned. This literature review was combined with a qualitative content analysis using an inductive and deductive approach to move away from top–down approaches and to illuminate the Latin American perspective on SCS.

Findings – The analysis of the scientific literature demonstrates that the traditional three pillars of sustainability are not enough to understand the specificities of the region. This review shows that cultural and institutional dimensions enhance the understanding of SCS locally. In addition, three major triggers for SCS in Latin American economies were found: green supply chain management practices, local development and stakeholder engagement.

Research limitations/implications – A deeper understanding of the Latin American perspective can support scholars worldwide in developing the field of SCS in relevant directions and in comprehending the specificities of their own countries by infusing cultural and institutional elements into their conceptualisations of SCS.

Originality/value – This paper provides an unexplored perspective on SCS because it analyses Latin American publications and presents a mapping of current SCS issues and research gaps that offers insights to guide future research in the field.

Keywords Sustainability, Latin America, Literature review, Supply chain management, Triggers

Paper type Literature review

Introduction

Over the past two decades, companies, governments, consumers and other stakeholders have increasingly taken initiatives to improve sustainability both locally and globally. The 17 Sustainable Development Goals (SDGs) are representative of this multi-level and multi-stakeholder urge for more sustainability in politics, society and businesses (United Nations, 2015). In the business world, sustainability initiatives require, among other things, that supply chains (SCs) and their members comply with ever-stricter regulations

and ever-greater demands for transparency (Pagell and Wu, 2009). However, to date, the instrumental approach to sustainability has dominated (Montabon *et al.*, 2016).

Gold and Schleper (2017) pointed out that the current concept of supply chain sustainability (SCS) is often instrumental. It is challenging to develop debates that consider sustainability as a social process that demands more than indicators and performance and that enables an understanding of the singular characteristics of different SC contexts. The study of SCS has increased in the last years (Ansari and Kant, 2017); however, more theoretical and methodological debates are needed (Matthews *et al.*, 2016).

The large number of literature reviews confirms the research interest in this field. Seuring and Müller (2008) and Carter and Rogers (2008) provided the initial concepts of SCS. Carter and Easton (2011) and Ashby *et al.* (2012) studied which sustainability dimensions are currently used in supply chain management (SCM). Touboulic and Walker (2015) highlighted which theories have been used. Ansari and Kant (2017) reviewed the research frameworks that have been developed to study SCS. These and other articles demonstrate how challenging the topic is and underline the opportunities to develop other reviews that focus on more than just the mainstream research topics of SCS and green supply chain management (GSCM). Other potential perspectives need to be demonstrated, such as SC partners' views on SCS in emerging economies (Huq *et al.*, 2014).

Pagell and Shevchenko (2014) argued that there are no truly sustainable SCs. Following this perspective, this paper uses the term "supply chain sustainability" rather than "sustainable supply chain management" (SSCM). This highlights that sustainability in SCs is also a matter for other stakeholders, not just managers. However, the paper still uses traditional terms like "triple bottom line" (TBL) to keep with the common understanding that those in SCS research are trying to build. It justifies the current research because more and more studies have analysed the practices in emerging economies from a developed country perspective without understanding their own realities. In this context, it focusses on scientific publications from Latin America as an example for these emerging economies, where the triggers for SCS remain largely unexplored. This gap requires an explorative approach, which the present paper addresses with the following research questions:

RQ1. How has the literature on SCS in Latin America evolved in the last decade (2007–2016)?

RQ2. What are the current sustainability issues studied in the SCS field in Latin American research articles?

RQ3. What are the main triggers for SCS in Latin American publications?

It is relevant to study SCS in Latin America for various reasons. On the one hand, the region faces specific issues such as economic development, cultural diversity, poverty and unequal access to healthcare, education and drinking water (United Nations Educational, Scientific and Cultural Organization, 2016). On the other hand, the research in SCS emerged from sub-conversations among European and North American scholars who seldom considered how emerging economies handle SCS practices (Gold and Schleper, 2017). Therefore, by focussing on SCS in this region, this paper highlights a context that has not been thoroughly investigated; it answers Blanco and Paiva's (2014) call to conduct more research on SCM in Latin America that can support the growth of the region via effective SCM that takes into account the regional market specificities and commonalities.

Giving an overview of the publications in Latin America in the last decade can foster theoretical advances in this and other regions with similar characteristics. This literature review is not only about mapping what researchers have been publishing in this understudied continent, but it is also about supporting other points of view for SCS. These views demonstrate some similarities and differences compared with publications from

developed countries from a bottom-up rather than a top–down approach. This literature review contributes to increasing attention on emerging economies and responds to the call for reviews in languages (Ansari and Kant, 2017) other than English.

The following two sections provide the theoretical background on the specific arguments and definitions used to justify the importance of the research field and the choice to talk about SCS rather than SSCM. Then, details and justifications on the methods used are given. This is followed by the findings on the specificities of Latin American literature on SCS and the descriptive features of SCS in Latin American publications, current sustainability issues and Latin American triggers. In the last two sections, a discussion is given and conclusions are drawn, highlighting the significant findings and implications and presenting an agenda for further research.

Sustainability and supply chain management

Over the last few years, sustainability-based studies have shown that businesses have increasingly introduced sustainability practices into their development strategies via, inter alia, the widespread TBL approach and have adapted their value chain to market dynamics (Elkington, 1997; Spence and Rinaldi, 2012). Usually, sustainability is defined as a value in society that can directly contribute (at least) to social, environmental and economic development. However, the use of sustainability as a normative concept has generated an instrumental perspective that must be changed (Gold and Schleper, 2017).

Nowadays, achieving sustainability entails the interaction of numerous actors. Among these, companies emerge as relevant actors in influencing sustainable development, particularly via their management of large networks such as SCs. SCM (Mentzer *et al.*, 2001) is now widely discussed in terms of its possible contribution to sustainable development and as a means to increase SC performance on sustainability (Golicic and Smith, 2013). Ansari and Kant (2017, p. 2) claim that "organisations willing to infuse sustainability practices in their SC need to satisfy various contradicting objectives such as profit maximisation while reducing environmental impacts and maximising social responsibility".

It is commonly agreed that the interest in SCS in Europe and North America began to grow in 2008 (Ahi and Searcy, 2013; Ashby *et al.*, 2012), creating several definitions of the term. Ahi and Searcy (2013) reviewed the most widespread concepts in the field and found at least 12 different definitions. A more recent literature review counts up to 16 different definitions of SCS (Dubey *et al.*, 2017). However, conceptualisations of SCS are largely inconclusive (Gold and Schleper, 2017). The most widespread approaches have looked at sustainability performance in SCs (Beske and Seuring, 2014; Seuring and Müller, 2008; Zhu *et al.*, 2007).

Other authors working on the relation between sustainability and SCM have done so from the TBL approach (Carter and Rogers, 2008; Pagell and Wu, 2009; Seuring and Müller, 2008). This approach seeks to induce a greater contribution from companies through integrating sustainable development values into business activities to disperse the necessary effort across all stakeholders. Nevertheless, the related literature still needs further investigation, as no common agreement has been reached on how SCS should happen. For Pagell and Shevchenko (2014, p. 47), "creating sustainable chains will likely require changes in both the what and how of providing value and a rethinking of what values means".

Even considering all of the current debates, the lack of conceptual clarity remains a challenge. More research on the process and conceptualisation of SCS rather than on sustainability performance itself is needed (Touboulic and Walker, 2015). As Pagell and Shevchenko (2014, p. 51) argued, "asking what is different rather than what is the same and looking at supply chains from new perspectives will help expand our understanding of SSCM". Therefore, an opportunity is still available to advance the comprehension of SCS

and to consider different points of view that can contribute to better conceptualising the topic. This is possible by observing, for instance, the contexts and institutional elements surrounding the current debate.

Sustainability and supply chain management in Latin America

The literature on SCS in Latin American countries is very scarce in current publications. Latin America refers to countries from the Americas where one of the Latin languages (French, Spanish or Portuguese) is spoken; thus, it relates to a cultural entity. According to Jabbour and Jabbour (2014), the SCS literature in Latin America focusses on the rapidly emerging economies, such as Brazil (Nicholls-Nixon *et al.*, 2011), rather than on the region as a whole.

Jabbour and Jabbour (2014) explain that for various reasons, Latin American publications have relatively low international visibility. This may be related to language (English is often poor, or not translated appropriately from Spanish or Portuguese), data collection characteristics (companies are reluctant to participate for reasons of confidentiality) and low survey response rates (Martinez and Kalliny, 2012). It can also be explained by the inaccurate representation of open access publications from the region in Google and Google Scholar (Orduña-Malea and López-Cózar, 2014).

The field of business sustainability in Latin America opens the door to further research (Jabbour and Jabbour, 2014). For instance, Latin America is of the utmost importance for research since Brazil, Columbia, Ecuador, Mexico and Peru not only represent five of the ten most biodiverse countries in the world, but are also among those countries exhibiting a high risk of species extinction (UNESCO, 2016). While the region has abundant natural resources, it lacks a qualified workforce that is capable of managing them effectively (Vassolo *et al.*, 2011). Also, the presence of small- and medium-sized enterprises (SMEs) and smaller businesses called "nanostores" influences the way SCs are shaped in the region and imply critical challenges in terms of local employment (Blanco and Fransoo, 2013). Clear challenges exist for companies struggling to sustainably develop their activities (Liberman and Newburry, 2013, p. 1).

The differences in consumption and production patterns in socio-economic and environmental vulnerabilities and in the competitive advantage compared with more developed countries mean that it is important to conduct more research in Latin America because specific policies are required for sustainable development (Guimarães, 2012). Hence, the current SCS focus in Latin American publications may differ from that of other regions and may even exhibit its own distinctive characteristics, as Griesse (2007) argued, in the case of Brazil.

To solve socio-economic and environmental issues in Latin America, Baud *et al.* (2011) highlighted the need to develop frameworks that encompass several research fields to address the complexity of research in the region and the interactions between states, civil society and market stakeholders at multiple levels. The institutional vulnerability of the region tends to be heightened by the presence of corruption and informal markets, the latter of which Vassolo *et al.* (2011) considered to be a cornerstone of Latin American economies, as these informal business activities sustain the economy and society. In their five-step model of SCS, Lüdeke-Freund *et al.* (2016) acknowledged that being aware of the institutions in which SCs are embedded (i.e. industry, socio-economic context, traditions and customs, culture, language, laws and regulations, stakeholders, values, beliefs and norms) is the first step toward developing sustainable businesses and SC practices. After this first step, the following are necessary: "support corporate orientation towards sustainability", "enable new managerial practices", "develop facilitators of sustainable supply chains", and "establish supply chain performance/value creation on the triple bottom line".

In the same vein, Silvestre (2015) used institutional analysis to discuss the structure of a specific sector in Brazil. For him, each SC follows a singular trajectory based on learning and collaboration. This demonstrates that institutional context has a huge impact on SC dynamics and on the practice of sustainability in emerging economies. For instance, SCs need to take account of "inadequate infrastructure, a high level of corruption, pressing social issues, and an 'informal' economy" (Silvestre, 2015, p. 164). Following these arguments, it is clear that studies in Latin America can bring relevant and potential contributions to understanding SCS. Thus, recognising what has been published in the region is a first step to defining the position of the region in the world and highlighting what can emerge as support for the research field.

Methods

Since little is known about SCS in Latin America, an explorative and structured literature review of scientific publications according to Fink (2014) was undertaken. A structured literature review is a method to identify, evaluate and interpret the themes of a body of reference documents in a systematic, explicit and reproducible way (Fink, 2014). A literature review generally aims to summarise the existing research and to highlight trends or issues; it can enhance existing theories or develop new ones (Harland *et al.*, 2006; Meredith, 1993).
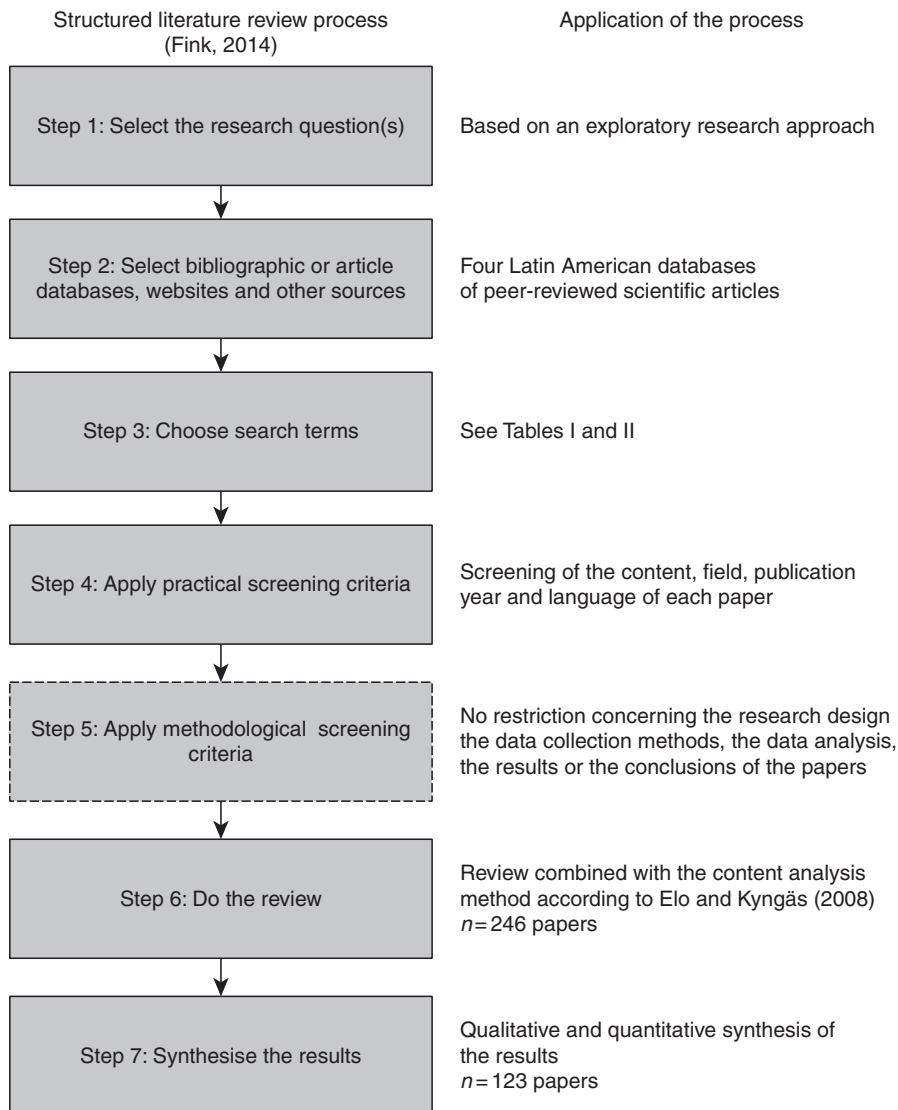
To conduct a structured literature review, Fink (2014) suggested a seven-step process, as illustrated in Figure 1; this aligns with Durach *et al.* (2017) regarding research on SCM. The literature review conducted in the present paper follows these seven steps as a basis for the research design.

In Step 1, an exploratory research was conducted on the focus of scientific publications from Latin America on SCS in order to answer the research questions (defined in the introduction). In Step 2, four Latin American databases of scientific publications were selected (see criteria in research boundaries section). In Step 3, the searched terms were defined (Table I). In Step 4, the content of the papers, the period of publication and the language were used as practical screening criteria. Step 5 was not used since the selection of papers was not restricted based on the research design, the data collection method, the data analysis or the conclusions of the reference documents. In Step 6, the review was combined with Elo and Kyngäs' (2008) content analysis method. This content analysis was based on both a deductive and inductive approach to classify the research papers and highlight the triggers for SCS. In Step 7, a synthesis of the results was done both qualitatively (highlighting aspects of SCS in Latin America) and quantitatively (e.g. number of publications).

Research boundaries

The research boundaries were confined by the exploratory nature of this literature review and the research questions. The analysis aimed to identify the triggers for SCS in Latin American papers; thus, the selection of reference documents was limited to scientific articles with a management and sustainability focus published in English, Spanish or Portuguese in the following countries: Argentina, Brazil, Chile, Colombia, Mexico and Venezuela. These countries are the most active in terms of number of scientific journals per country (see www.redalyc.org/).

The databases that were used include Scielo (www.scielo.org), Latindex (www.latindex.com), Redalyc (www.redalyc.org/) and Spell (www.spell.org.br/, specific to Brazil). These are the most widespread Latin American databases. The timeframe for this research was restricted to the last decade, that is, from the beginning of 2007 until the end of 2016. Papers from other databases and papers that did not have a management and sustainability focus (e.g. limited to a technical or political science focus) were excluded. Hence, as Touboulic and Walker (2015) acknowledged in their literature review, relevant papers from Latin America on SCS could have been missed, since just four databases were used.

Structured literature review process (Fink, 2014)	Application of the process
Step 1: Select the research question(s)	Based on an exploratory research approach
Step 2: Select bibliographic or article databases, websites and other sources	Four Latin American databases of peer-reviewed scientific articles
Step 3: Choose search terms	See Tables I and II
Step 4: Apply practical screening criteria	Screening of the content, field, publication year and language of each paper
Step 5: Apply methodological screening criteria	No restriction concerning the research design the data collection methods, the data analysis, the results or the conclusions of the papers
Step 6: Do the review	Review combined with the content analysis method according to Elo and Kyngäs (2008) $n = 246$ papers
Step 7: Synthesise the results	Qualitative and quantitative synthesis of the results $n = 123$ papers

Source: Own illustration based on Fink (2014)

Figure 1.
Research process

The selection of papers was conducted based on a structured keyword search built by the authors (Table I). In some cases, truncated words were enough to extract the relevant papers for the analysis (i.e. "sustainab"). In other cases, it was necessary to use wildcards (i.e. "sustainab*") (Gimenez and Tachizawa, 2012). The research focussed on peer-reviewed publications in order to control quality (Burgess *et al.*, 2006). The research did not focus only on high-impact journals, but it looked at all contributions that could bring up current Latin American perspectives from peer-reviewed publications in the selected countries. One main reason for this is that no index that ranks journals in the region exists.

English	Portuguese	Spanish
Sustainab* AND supply chain	Sustent* E cadeia de suprimento	Sostenib*/sustentab* Y cadena de abastecimiento/suministro
Environment* AND supply chain	Ambient* E cadeia de suprimento	Ambient* Y cadena de abastecimiento/suministro
Green AND supply chain	Verde E cadeia de suprimento	verde Y cadena de abastecimiento/suministro
Social* AND supply chain	Social* E cadeia de suprimento	Social* Y cadena de abastecimiento/suministro
Responsib* AND supply chain	Respons* E cadeia de suprimento	Responsab* Y cadena/red de abastecimiento/suministro
Supply chain	Cadeia de suprimento	Cadena de abastecimiento/suministro
Chain	Cadeia	Cadena

Table I.
Keywords used for the selection of papers

Except for Latindex, the papers were directly extracted from the databases with the keywords defined in Table I. For Latindex, it was necessary to select the journals first. The categories that were used to select the journals from the Latindex database are shown in Table II, and they are aligned with the classification of journals in the other databases in terms of research focus (i.e. management and/or sustainability). Then, each journal from the Latindex database was screened with the keywords defined in Table I to extract the papers.

The task of constructing the database was divided equally between both researchers, and each researcher reviewed the other's work. This process followed the need that Tranfield *et al.* (2003) expressed that more than one reviewer should conduct such an analysis. The references to all of the selected articles (with title, keywords, abstract, authors and the journal of publication) were saved in a shared Excel file, which was checked against duplicates. In total, an initial list of 246 articles was compiled and analysed using the qualitative content analysis method (Elo and Kyngäs, 2008). Based on the defined boundaries and the review process, a total of 123 papers (as of June 2017) were analysed (full bibliographic details available upon request from the researchers).

Content analysis
Content analysis is a method used to analyse a large body of documents (e.g. transcripts of interviews, scientific papers and protocols) and widely refers to the work of Mayring (2000), which several other researchers have since built upon (e.g. Elo and Kyngäs, 2008; Neuendorf, 2002). The method serves both qualitative and quantitative data analyses with a deductive or an inductive approach. Elo and Kyngäs (2008) defined the deductive approach as an analysis based on previous knowledge and the inductive approach as an analysis where concepts are derived from the data.

The deductive approach was used to classify the selected papers according to the economic, social and environmental dimensions, attributing one, several (referred to as "mix") or all dimensions (referred to as "TBL") to each paper. The classifications of the papers per sustainability dimension were based on their title, abstract and keywords.

Category (in original language)	Category (English translation)
Artes y humanidades	Social sciences and humanities
Ciencias sociales	Social sciences
Ciencias de la ingeniería	Engineering sciences
Ciencias exactas y naturales	Exact and natural sciences
Multidisciplinarias	Multidisciplinary

Table II.
Classification of journals used to select papers from the Latindex database

The predominance of terms like "competitiveness" or "cost saving", "GSCM" or "carbon footprint", "CSR" or "social capital" and "sustainability" classified a paper under the economic, environmental, social or TBL dimensions, respectively. When a paper addressed sustainability aspects from the TBL as well as other relevant aspects that are not traditionally part of the TBL, these papers were categorised with the dimension TBL+. A deeper analysis was then conducted on the introduction, methods and conclusion sections of each paper to understand how SCS is analysed, to comprehend sustainability practices in SCM and to identify which approaches and methods are used. A keyword search (see Table I) was conducted for the whole paper to identify SCS issues.

The inductive approach was used to identify the meaning of the environmental, social and economic dimensions and to record other possible aspects of sustainability. Although research from North America and Europe often argues that the environmental and social dimensions implicitly represent the economic dimension (e.g. Seuring and Müller, 2008), this paper chose to include it to avoid any assumptions that the economic dimension was treated similarly in Latin American research. Moreover, since triggers for SCS in Latin America have been understudied to date, the inductive approach was highly relevant to identify them. These triggers were defined by using the exact wording found in the papers that were analysed (two keywords that represented each paper's focus related to SCS were highlighted). From the keywords attributed to each paper, the recurrence of the same keywords was counted, and the keywords that appeared in at least ten papers were highlighted to define the triggers. Similar keywords were combined to give a definition to each trigger and to reflect local understandings and characteristics of SCS. Thus, the triggers represented what has been published to date and support the comprehension of future research gaps.

The researchers also summarised each paper's content, which was screened to highlight SCS issues in each paper and their relation with the SDGs. The researchers reviewed each other's categorisation and analysis.

Rigour of the research process
The research was designed to ensure a systematic, explicit and reproducible process by adopting the structured literature review process defined by Fink (2014). Being aware of the need for reliability (Burgess *et al.*, 2006), the researchers followed Touboulic and Walker's (2015) approach on their review of SCS theories and performed several rounds of analysis to reduce bias and increase reliability. This reliability was also supported by the fact that the researchers have been collaborating for several years, a scenario that Seuring and Müller (2008) encourage in their literature review on SCS. Additionally, to assess the validity of the findings, they were compared with some other reference documents that focussed on SCS in the region (e.g. Blanco and Paiva, 2014) despite the limited studies on SCS in Latin America to date.

Results and findings
This section presents the answers to the three questions defined in the introduction. First, the general trends in Latin American publications are given. Second, the current dimensions of sustainability in Latin American research papers are analysed. Third, characteristics that are specific to this literature stream are highlighted as triggers for SCS.

Descriptive features of Latin American publications
The following summarises how scholars published on SCS in Latin America in the last decade based on the five following features: number of articles published, list of journals, total of publications per country, industry sectors and research methodologies.

This overview supports the comprehension of the region and contributes to responding to the following research question:

RQ1. How has the literature on SCS in Latin America evolved in the last decade (2007–2016)?

Number of articles published. The analysed literature comprised a total of 123 papers. In the last decade (2007–2016), the number of publications on SCS in Latin America has increased, as shown in Figure 2. A limited number of publications from 2007 to 2010 (seven or less per year) were available. From 2011 to 2015, the number of papers significantly rose and reached its peak in 2015 with 30 publications. In 2016, the number of publications fell back to 18.

Part of this rise in publications is aligned with Gold (2016), who claimed that publications with Brazilian authors and co-authors have increased substantially, which demonstrates that the scholars there have progressively picked up the topic of SCS. For him, the building up of academic knowledge and the comprehension of empirical phenomena that can support practitioners to change their practices explain this progress. Since there were three or less publications in Argentina, Chile and Venezuela, no conclusions can be drawn on the evolution of the number of publications in these countries. However, Figure 3 shows that the rise in the number of publications is clearly attributable to publications in Brazil, followed by Colombia and Mexico. Publications in these three countries evolved differently from 2007 until 2014, but all reached their peak in 2015.

Journals. Publications are dispersed among 67 different journals. More than half of these journals (42 journals) have only one publication related to the research focus, which
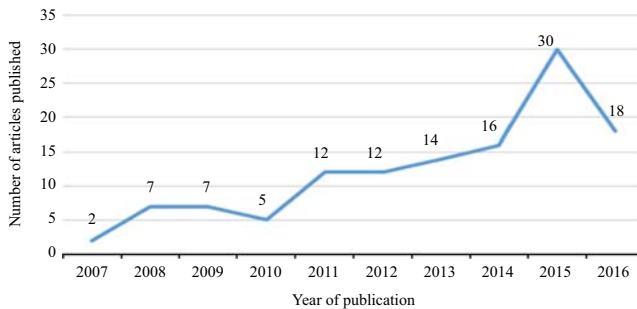
Figure 2.
Number of
publications per year
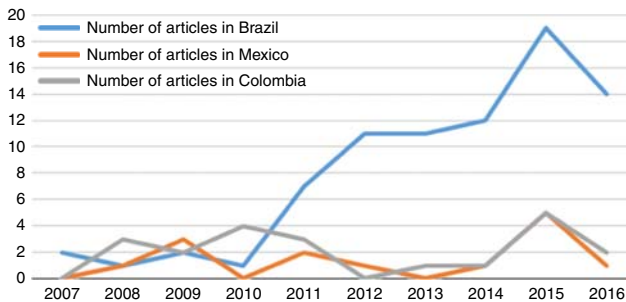
Note: $n = 123$

Figure 3.
Number of articles per
year in Brazil, Mexico
and Colombia

Note: $n = 115$

highlights a wide distribution of publications across journals. These journals with only one publication focus, for instance, on agriculture, tourism, engineering, business administration, management or sustainability. Table III shows the journals that have more than one publication on SCS from 2007 to 2016.

Not surprisingly, a Latin American journal focussing on SCM, the *Journal of Operations and Supply Chain Management*, has the largest number of publications in the field (nine papers). It is followed by *Organizações Rurais & Agroindustriais (Rural & Agro-industries Organisations)* (eight papers), which is also in line with the fact that agriculture is very important for the region (accounting for about 50 per cent of the global soybeans and sugar exports) and the fact that Latin America still has to face important challenges in this sector, such as productivity, infrastructures and logistics (Rabobank, 2015; Haar, 2015).

Publications per country. A high proportion of the publications are in Brazil (80 papers), with the other countries contributing the following: Colombia (21), Mexico (14), Argentina (3), Chile (3) and Venezuela (2) (see Figure 4).

Whatever the reason for this diversified share of publications per country, it shows that SCS is more in the focus of Brazilian research publications, followed by Colombian and Mexican publications. From the present analysis, the contributions of Argentine, Chilean and Venezuelan publications in SCS are very limited. These observations are in line with Blanco and Paiva (2014), who accounted for the large number of publications in Brazil by the fact that two of the top-ranked universities in the region are located in this country. These authors explained that the next top contributors, Mexico and Colombia, are the second and fourth largest economies in the region, respectively. Although the economies and university rankings of Chile and Argentina are also respectable, Blanco and Paiva (2014) noted a very limited number of contributions from these countries.

Journal	Number of articles	Country
Journal of Operations and Supply Chain Management (JOSCM)	9	Brazil
Organizações Rurais & Agroindustriais	8	Brazil
Gestão & Produção	6	Brazil
Gestão & Regionalidade	5	Brazil
Production	5	Brazil
Revista de Gestão Social e Ambiental	4	Brazil
Dyna	3	Colombia
Innovar	3	Colombia
Producción + Limpia	3	Colombia
Revista de Administração da UNIMEP	3	Brazil
Revista de Administração de Empresas	3	Brazil
Revista Gestão Ambiental e Sustentabilidade	3	Brazil
BASE – Revista de Administração e Contabilidade da UNISINOS	2	Brazil
Contaduría y Administración	2	Mexico
Desenvolvimento em Questão	2	Brazil
Dimensión Empresarial	2	Colombia
Estudios Gerenciales	2	Colombia
Independent Journal of Management & Production	2	Brazil
Interações	2	Brazil
MERCADOS y Negocios	2	Mexico
Nova Scientia	2	Mexico
RACE: Revista de Administração, Contabilidade e Economia	2	Brazil
Revista de Administração da USP	2	Brazil
Revista de Administração e Inovação	2	Brazil
Sistema & Gestão	2	Brazil

Table III.
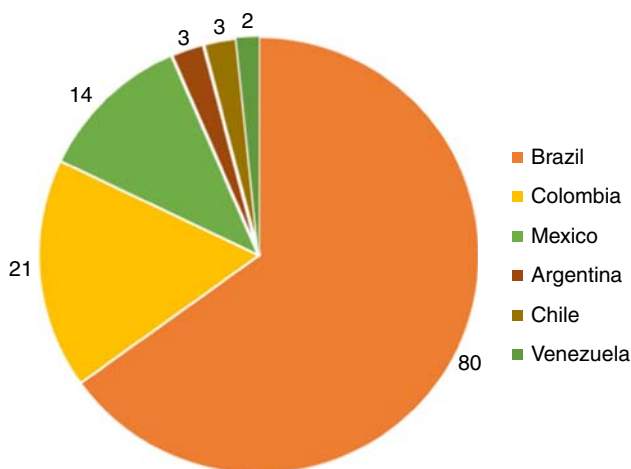Number of articles per journal with more than one paper on SCS

Figure 4.
Publications per
country

Note: $n = 123$

Industry sectors. Table IV shows a list of the different sectors where the topic of SCS is studied. The most important sectors represented in this analysis are agriculture (17 papers), energy (12 papers) and food (including 11 papers that look at the meat, coffee, cashew, peach, rice and organic food SCs). These findings are aligned with the focus of the journals analysed concerning agriculture and food. Energy also appears as an important topic, with biofuels, biogas, solar energy, gas and oil addressed. The topic of energy will probably grow in importance in the coming years, as Latin America produces more than 50 per cent of its electricity from renewable sources (compared to the 22 per cent worldwide average) as well

Industry sectors	Number of articles
Agriculture	17
Energy	12
Food	11
Automotive	7
Heavy industries[a]	7
Waste management and recycling[b]	7
General	6
Electronics and high tech	5
Beverages[c]	4
Multiple sectors	4
Tourism	4
Cosmetics	3
Dairy	3
Plastic industry	2
Trade and finance	2
Other[d]	9
None	20
Total	123

Table IV.
Number of papers
per sector

Notes: $n = 123$. [a]Construction, mining, steel and shipbuilding; [b]cartons, used cooking oil, electronics and wood products; [c]wine and dairy products; [d]chemistry, consumer goods, distribution, forest products, furniture, pharmaceuticals, retail, sustainability research and textiles

as because of environmental and social controversies related to hydropower plants in Brazil and Chile (*The Economist*, 2016).

The importance of certain sectors such as food and beverages can be explained by the fact that large retailers operate in Brazil and Chile and because some regional multinational companies (MNEs or "multi-Latinas") are present on the global market, although small stores still dominate the retail sector in Latin America (Blanco and Paiva, 2014; Blanco and Fransoo, 2013).

Research methodologies. Six different categories of research methodologies in the analysed body of literature were differentiated. These categories are similar to the ones defined by Seuring and Müller (2008), but the paper distinguished additional papers that were only based on interviews. Hence, the papers were distinguished as follows: theoretical and conceptual papers (theory), case studies (case), surveys, modelling papers (model), literature reviews (review) and interviews. The detailed classification of papers per type of research methodology used and per sustainability dimension is available from the researchers upon request.

Figure 5 shows that qualitative research methods (i.e. case and interview) dominated the methodologies used in Latin American papers, which is contrary to other literature reviews on SCS. For example, Carter and Easton (2011) found that surveys were the main methodology used. In the literature review by Seuring and Müller (2008), case studies were also predominant, but their paper included more theory and survey papers and fewer reviews than are presented here. These differences mean that there are different approaches used in Latin America to study the topic of SCS.

As Martinez and Kalliny (2012) highlighted, companies' low willingness and response rate when participating in surveys in Latin America are an obstacle for conducting more quantitative research. These findings also corroborate the fact that the region has various specificities related to the geography, which are easier to highlight with qualitative research methods such as case studies or interviews rather than quantitative methods. According to Blanco and Paiva (2014), the predominance of case studies shows that researchers in the region are putting efforts into getting close to local industries to collaborate with them and conduct research that is relevant for the region.

Current sustainability issues in Latin America
According to Montabon *et al.* (2016), several scholars have used the term "sustainability" to only refer to the use of the economic and environmental dimensions. However, that is not acceptable for new publications, as it has been made clear that sustainability studies should
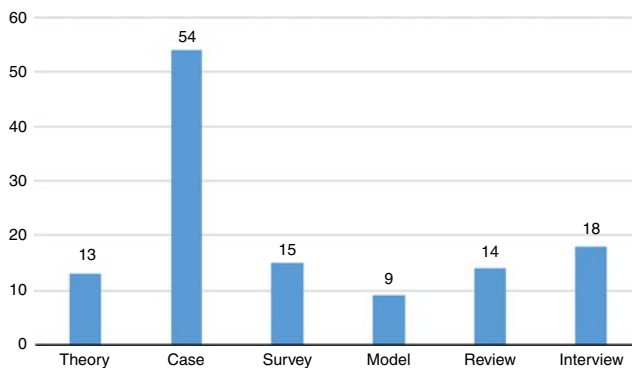
Note: *n* = 123

Figure 5.
Research methodologies used in the papers

also include the social dimension. Thus, by considering that the recent SDGs broadened the need to incorporate sustainability issues from the operational and broad environment of organisations (e.g. poverty reduction, water, partnership), this paper also uses this holistic perspective to develop its analysis. Since it is still a challenge to understand the topic with this type of overlapping, this paper addresses the following research question:
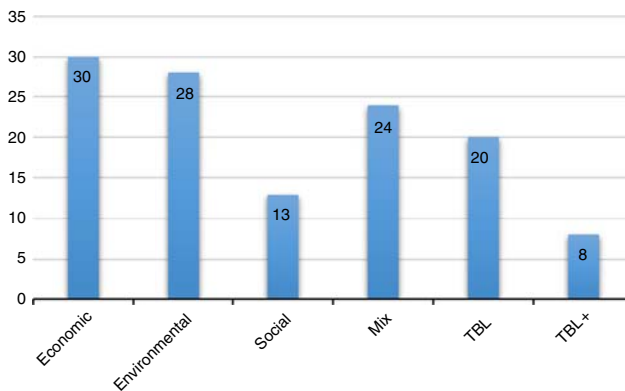
RQ2. What are the current sustainability issues studied in the SCM field in Latin American research articles?

To identify these sustainability issues, Figure 6 presents the main sustainability dimensions studied in the region. Throughout the analysis, it was not possible to use only the traditional perspective of TBL, since some papers presented other dimensions that are broader than Elkington's (1997) definition. Following the SDGs' requirements, it is crucial to move forward in the debate and consider other elements in order to achieve a sustainable development. However, a high number of papers still use the TBL concept to develop their research, which is why this paper not only refers to it in its analysis, but it also brings up the need for alternative viewpoints.

The majority of the papers focussed on the economic (30 out of 123) and the environmental (28 out of 123) dimensions, which is similar to other literature reviews developed and published in North America and Europe. However, differences relating to the social dimension (13 out of 123) appeared in contrast to other structured reviews (e.g. Seuring and Müller, 2008; Touboulic and Walker, 2015). The proportion of the social dimension is higher in the present review compared to the other two dimensions. This may demonstrate a different motivation for developing research in the region, but the influence from the current literature on the topic is still significantly noticeable, as alternative approaches that can support new insights and purposes are almost non-existent.

In addition, two other dimensions (Mix and TBL+) were used to classify the papers analysed. The total number of papers that used a mixed approach (24 out of 123) is similar to those that used the TBL approach (20 out of 123). Last but not least, a new and interesting finding relates to the TBL+ approach (8 out of 123); it is lower in proportion than in the other groups, but it demonstrates another classification for the study of SCS. Figure 6 shows the classification of articles per sustainability dimension.

The eight papers classified as TBL+ show that two additional dimensions could be used in the emerging economies debate: cultural, which is usually related to local traditions and routines (e.g. understanding what sustainability means for several SC members and how it

Figure 6.
Current sustainability issues in SCS research in Latin America

Note: n = 123

is implemented throughout their daily activities), and institutional, which is related to political characteristics (e.g. the rejection of cooperatives in some regions because they represent a threat to independent enterprises on the local market), institutional practices (e.g. the major focus is on SMEs rather than MNEs) and the geographic perspective in terms of territory and space (e.g. increases in the value of local goods/products).

The cultural approach was already mentioned in other articles (e.g. Carter and Rogers, 2008), but the focus was on the idea of organisational culture. They claimed that values and ethics facilitate a better performance. That was also found in some papers regarding industrial sectors' practices and traditions. However, the core of the cultural approach found here is its great influence on the daily practices regarding SCS. For instance, when sustainability in Amazonia is only possible in terms of the working conditions and the current dynamic of the workforce in the region (Paper 6), it influences the traditions and customs (Lüdeke-Freund *et al.*, 2016), that is, it creates impacts affecting the sustainability of SCs.

In parallel, the institutional debate has already been spread throughout the literature; however, a significant emphasis has been placed on the institutional environment. The challenge is to introduce other characteristics. For instance, it is necessary to consider the corrupt behaviour that is spread in some countries, to observe stakeholder relations in terms of the value of local products and enterprises and to be aware of the local context (Paper 36), which also considers the natural resources and potential natural disasters. As presented by Silvestre (2015), SCS is only possible from different trajectories that are related to the context, which for him was very clear in emerging economies.

Although the results show that the integration of a cultural and institutional dimension is still an incipient approach when studying SCS in Latin American publications (eight TBL+papers), the use of these dimensions in further research could potentially facilitate more comprehensive and region-specific contributions.

Latin American triggers for SCS studies
Based on the current sustainability issues, the content analysis of the papers demonstrates some patterns that represent relevant issues for studying SCS. Actually, these patterns show which research topics have been considered in the region and may induce motivation to develop new studies. Thus, the following question is addressed:

   RQ3. What are the main triggers for SCS in Latin American publications?

Looking into the papers, it is possible to highlight the main triggers for SCS studies in Latin America. A closer look at the 123 articles reveals three main insights concerning GSCM practices, local development and stakeholder engagement. First, the environmental dimension (GSCM practices) is highlighted. Second, local development emerges as a useful finding, as its usual focus is on economic, social and cultural debates. From this perspective, more value is assigned to local elements, revealing important regional characteristics. The last trigger found is stakeholder engagement. The influences of the institutional environment, economic issues and cultural beliefs demonstrate how favourable it is to analyse the region from a perspective that accounts for its own characteristics.

Green supply chain management practices. As found in the identified papers, GSCM is one of the most prominent concerns (Jabbour and Jabbour, 2014; Blanco and Paiva, 2014). In total, 30 papers (out of 123) focus on GSCM, and nine studies target reverse logistics. These papers have addressed very similar issues as in other literature reviews, such as ISO 14000 certification and other environmental standards (Papers 9; 29). In parallel, natural resource management (e.g. water management) (Papers 3; 87) emerges as an important issue, as the main industry sectors in the region are agriculture, energy and food. The present analysis demonstrates that green remanufacturing and production, reverse

logistics and waste management are elements that can stimulate different practices from industries and companies to change their practices toward environmental concerns.

Local development. This represents a key part of the analysis since it clearly reveals how research has to be adapted to suit the local context and institutional environment. Regional specificities clearly need to be taken into account when attempting to improve SCS. The topic of local development is covered by 21 papers. In these papers, the development of the local market and local employment is seen as a priority, and the institutional challenges related to governance and weak public policies that limit the influence of Latin American companies on global practices are highlighted (Paper 20). The role of SCs in local markets is critical since the creation of jobs depends on the development strategy of the SC (Paper 51).

Also, some countries have access to relevant resources, such as solar power in Mexico, that could largely contribute to the development of the economy, but the country lacks skilled labour, infrastructure, a clear legal framework and market and financial support (Paper 116). Vassolo *et al.* (2011) observed these weaknesses. Short SCs for farming activities are also emphasised as a solution to comply with legal requirements by developing cooperatives (Paper 43).

Local development is also highlighted by the purchasing practices in the SC of the hotel sector, where buying from local communities or at least using national products to sustain the economy and the job market is recommended (Paper 110). The approaches from multinationals that do not integrate local suppliers are also criticised, for example, in the case of the automotive industry in Mexico because following trade agreements such as the North American Free Trade Agreement were expected to create jobs locally, which occurred to a limited extent because, among other reasons, OEMs suppliers were pushed to relocate to Mexico (Papers 115, 122).

Stakeholder engagement. The topic of stakeholder engagement is the focus of 13 papers. Several papers highlight the need for focal companies to engage with local and smaller companies to support the development of local SMEs via technological diffusion, learning processes for the employees in SMEs and access to technical standards; this type of governance is qualified as "captive" (cautiva) (Paper 144). But such engagements also need the development of industrial policies that take into account local industrial development and the competitive advantages of the region, although the risk aversion of entrepreneurs in the region is still an issue to be tackled (Paper 117). The topic of supplier selection to enhance the green performance of SCs is also addressed according to suppliers' environmental performance (Paper 106) or according to both social and environmental criteria (Paper 26).

Generally speaking, stakeholder engagement with local communities is acknowledged as an important factor in addition to internal, supplier and customer-related practices to facilitate the implementation of GSCM practices via information sharing, collaboration, assistance and integration processes (Wong *et al.*, 2015), which is also true for SCS in general (Pagell and Shevchenko, 2014).

Figure 7 maps the sustainability issues addressed in SCM in this review. As presented above, it is necessary to use the TBL+ approach, which means that using economic, social and environmental dimensions only is limited. To increase sustainability and SCM practices in the region, two other dimensions from the literature review clearly need to be inserted: cultural and institutional. This is in line with Sachs (2002), who underlined in a Brazilian publication that eight dimensions would be needed to study sustainable development, highlighting the limits of the TBL approach. For him, political, territorial and other elements support a better development model.

Figure 7 shows a star with five tips. However, the reader is invited to imagine the figure as a piece of origami. In Japanese culture, an origami is a geometric result of folding a piece
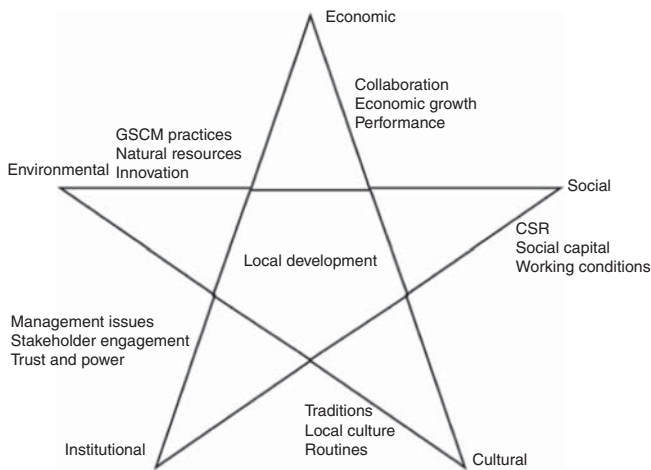
Economic

Collaboration
Economic growth
Performance

GSCM practices
Natural resources
Environmental Innovation

Social

CSR
Social capital
Working conditions

Local development

Management issues
Stakeholder engagement
Trust and power

Traditions
Local culture
Routines

Institutional

Cultural

of paper without cutting or gluing it. This metaphor can also be used to debate sustainability. Following the six elements highlighted in the figure (i.e. economic, environmental, institutional, cultural, social and local development), some geometric folds could emerge and better represent the local practices of sustainability. For instance, depending on the sector or region, the institutional element could have more relevance than the environmental one, which reorganises the design of the origami, but the structure based on the six elements is kept. The authors found that throughout the analysis, local development (besides being a trigger) is a relevant issue used as the core of several papers, which is why this is placed at the centre.

As observed in Figure 7, there are similarities regarding the meaning of sustainability dimensions in Latin American and North American and European publications; however, differences are also observed. In that case, the economic dimension means that researchers need to go beyond the competitive paradigm and analyse also how the sustainability paradigm could emerge. Thus, the economic dimension is closely related to local development (the base of emerging economies approach). For instance, when SMEs are included in SCs, since it has a high impact on local development (Paper 42, 124), it is possible to skip the debate focussed only on competitiveness and consider other elements such as decent work and economic growth (SDG Goal No. 8).

To understand the environmental dimension, it is necessary to consider that there is a very close relation with the current debate on SCM. However, the environmental dimension in Latin America is mostly related to how to manage natural resources and introduce this into environmental management. This is clear when papers focus on the impact of water management (Paper 5) and waste management (Paper 21), for example. Several SDGs support this perspective, highlighting affordable and clean energy and climate action (Goals 7 and 13, respectively).

In contrast, the social dimension in Latin America means a clear concern with how people have been impacted by the market context. It is not only about how to introduce human elements in the SC, but also how the SC activities influence people's lives. This was clear regarding working conditions (Paper 7), social innovation (Paper 55) and social capital (Paper 132). When the social dimension is highlighted, there is a debate regarding no poverty (SDG Goal No. 1) and reduced inequalities (SDG Goal No. 10). Following this perspective, the social dimension requires concrete efforts to be put into practice.

There is alignment between the origami framework and the SDGs not only about social, economic and environmental dimensions, but also as presented before – in terms of cultural and institutional elements that are required. Companies need to consider the multi-elements required from the region where they are operating to adapt their strategies and contribute to the SDGs. The origami framework maps the main issues to be addressed in the region where companies want to work and supports the creation of their own geometric folds combining the six elements presented in the figure. Research that follows the SDG guidelines could address several research gaps and contribute to more SCS studies in emerging economies.

The current analysis reveals that as far as analysing SCS is concerned, no universally applicable theory exists because behavioural and contextual differences abound. However, augmenting standard sustainability analyses by incorporating cultural and institutional issues can provide insights into several areas of SCS research. It is necessary to consider other characteristics that totally represent the local context and demonstrate that is not always necessary to follow North American and European research and develop "colonised" research. More representation of local characteristics is needed to stimulate the current theoretical perspectives and to build theory and relevance for the research topic. The same needs could exist in other regions and could augment better understanding and could contribute to SCS research and practice. Therefore, it is even more necessary to engage different actors in understanding sustainability and SCM as a strong element in society.

Discussion

The findings demonstrate the importance of analysing other research for regions that are not in the current mainstream perspective on SCS. It is not about "reinventing the wheel", but specificities in the region must receive careful attention regarding the use of theoretical and methodological approaches (Touboulic and Walker, 2015). In the Latin American case, it is insightful to use more elements than the traditional normative concept of sustainability (Gold and Schleper, 2017), as TBL by itself is not enough to solve local problems and facilitate the reach of SCS practices.

Increasing the knowledge about these regions' own characteristics and having more representation about building theory and showing empirical evidence are needed. Such regional and country characteristics in Latin America should concern managerial practices and the perceptions of effectiveness that are impacted by national cultures (Castaño *et al.*, 2015) and institutions. For instance, practices similar to "modern slavery" are common in some regions depending on the culture, the working conditions and work opportunities (Paper 6).

Socially unsustainable practices are also observed in other emerging economies, such as Bangladesh (i.e. child labour), and some research shows that attempts to stop such unsustainable practices along the SC may lead to even worse environmental and social issues (Huq *et al.*, 2014). Such negative impacts of industrialised stakeholder-led SC practices could be avoided if the local context was better understood. Once more, this highlights the need to understand the local cultural and socio-economic context that SC partners are embedded in. For this purpose, Huq *et al.* (2014) encouraged a shift from efforts aimed to improve audits and monitoring practices to efforts to create trust and more open dialogue between buyers and suppliers.

Concerning the environmental dimension, similarities are observed between the Latin American focus on GSCM and other literature reviews from more developed countries, especially the focus on green operations in SCs, such as reverse logistics. But some insights have not been investigated, such as the topic of "green talent" (Papers 111; 112). Giving a holistic picture of the skills that "green" managers in Mexico should have to successfully

establish green practices in the SC may also be relevant for other emerging economies and for developed economies.

The findings also reveal an unexpectedly strong focus on economic aspects in the SCS papers, as research in more developed countries often argues that the economic dimension is implied behind the social and environmental dimensions (Seuring and Müller, 2008). However, in terms of SCS, the results are similar to those of Zhu *et al.* (2007) and Esfahbodi *et al.* (2017), who found that the environmental and economic perspectives were central in China and Iran. Whatever the case, local scholars need to increase their focus on social issues.

The fact that a large share of the population in Latin America is at the bottom of the income pyramid requires that firms not only adapt their strategies to the needs of these people and but also target high-income consumers (Vassolo *et al.*, 2011). The social dimension in the present analysis emphasises the importance of social capital and informal relations in enhancing the development of local communities via cooperatives to more effectively implement sustainability practices in the SC. Felzensztein *et al.* (2014) emphasised the creation of cooperatives in Latin America to better represent SMEs, as they build trust and social capital, which are two factors that are needed to enhance social interactions between companies and their likelihood to cooperate and thus eventually integrate SCs and become more resilient.

One of the most efficient ways to develop studies on SCS in Latin America is to use the TBL+ approach, in which economic, environmental and social dimensions are required in addition to institutional and cultural dimensions, all of which are aligned with local development needs that are illustrated with the origami framework. Following this perspective, it is possible to observe local characteristics (e.g. the importance of local development and institutions), which corroborate other findings (e.g. Griesse, 2007). However, the origami framework could apply to other contexts, which highlights the need to reflect more Latin American research specificities. Specificities could be highlighted, as argued by Lüdeke-Freund *et al.* (2016), by combining research and practice on SCS and business models. This approach is relevant to consider the socio-economic and institutional environment where companies and other stakeholders are embedded in order to create value not only for wealthy consumers, but also for multiple other stakeholders, including local communities. The present analysis shows that this is particularly true for activities in Latin America that are instable and labour intensive, such as the recycling of cardboard "cartoneros" (Paper 119) or fishing activity among local and indigenous people (Paper 39). These segments of the population are often marginalised and not well integrated into the local economy. As Blanco and Paiva (2014) argued, global competitive pressures are pushing companies in Latin America to adapt their business models and SCs, but obstacles such as lack of infrastructure, poverty and safety issues mean that the efforts toward more SCS practices are slow.

Figure 8 highlights the gaps that this paper identified for SCS in Latin America, which researchers and practitioners from developed and Latin American economies alike should address. Latin American scholars need to be more daring and should pursue more locally
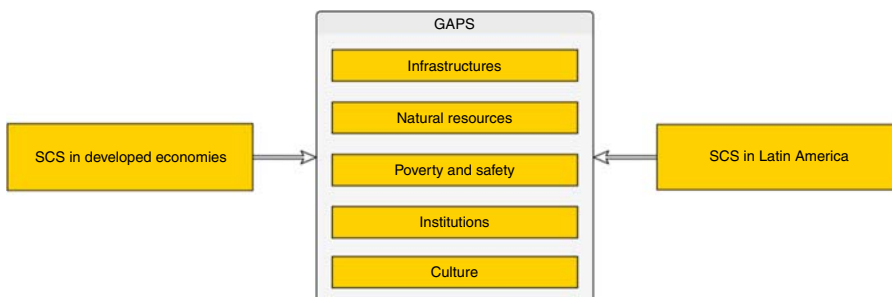

Figure 8.
Gaps in research and
practice for SCS in
Latin America

based theories. This will also be beneficial to scholars from developed countries, since any such new theories are likely to complement the understanding of global SCs and of how sustainability might be used in different contexts. Clearly, learning how to practice and understand sustainability in SCs is important in a region that is outside of the mainstream. Perhaps this review can be used as a starting point to develop new research, to develop cooperation between the researchers that work on similar topics and to increase local and worldwide contributions (SDG Goal No. 17).

Conclusion

As stated by Ansari and Kant (2017), SCS is a fruitful area of research, an idea that this paper also recognises. Studies can be developed in several ways, as they have been in Latin America, and they can stimulate more insights from other emerging economies and debates that are not in the mainstream. Gold and Schleper (2017) called on European researchers to re-imagine SCS, which creates an opportunity to think outside the box and to see other points of view. The current debate on SCS is rich and useful, but it is necessary to observe other contexts since most SCs today are global (Beske and Seuring, 2014).

Main contributions

This literature review has several significant findings. The sustainability and SCM issues found in the literature review contribute to renewing the current conceptualisation of SCS (Gold and Schleper, 2017), stimulate a better application of the usual concept and facilitate alternative perspectives. Also, it was observed that the most studied industry sectors were agriculture, energy and food. This result demonstrates the main concerns for the region and can support new partnerships among scholars in different regions that could improve the comprehension of SCS studies in these sectors.

In the content analysis, three main triggers were discerned (GSCM practices, local development and stakeholder engagement), but other topics were also mentioned as important for developing SCS studies in Latin America; these included innovation, risk management, trust, power among SC members, supplier selection, environmental legislation, social capital, corporate social responsibility, working conditions, traditions, culture, SC integration, competitiveness and SC performance. These issues are similar to the topics discussed in the research in developed countries, but more comprehensive points of view on SCS are needed.

One major finding of this review is that the use of the TBL approach cannot represent full sustainability on a local basis in Latin America. According to Ansari and Kant (2017, p. 2), the "research on SSCM is still in its infancy when seen in terms of integration of all three dimensions (i.e. the TBL approach)". This justifies and creates opportunities and interesting insights for scholars to develop research in Latin America and beyond (including North America and Europe) using a more localised point of view that is not restricted to the current normative sustainability concept.

Last but not least, following all of these significant findings and reflecting on SCS studies as a whole, the problem of how to develop research on the topic has received little attention. Touboulic and Walker (2015) claimed that inter-disciplinary and transformative aspects are inherent to SCS research. However, many researchers have a high engagement with and fixed views on the elements that are related to the traditional manner of studying SCM; this is clearly not the best way to study SCS, as the issue is much more complex. number of publications that focus on theory and conceptualisation should increase because the study of SCM is more comprehensive when several theories are combined, and highlighting how to make SC more competitive is still needed, as González-Loureiro *et al.* (2015) argued. This is also an issue in Latin American literature in terms of economic and local development.

Implications and agenda for future research

Several implications can be derived for researchers and practitioners in the field of SCS. Generally speaking, only a few publications have addressed sustainability and SCM from a holistic perspective. Hence, researchers should investigate more deeply the specificities of SCS in Latin America and other emerging economies to highlight the sustainability aspects that need to be taken into consideration and that are context specific to building more sustainable SCs using the origami framework. When exploring the literature outside North America and Europe, researchers need to adapt mind-sets regarding the way research is conducted today. For example, literature reviews rely on the ranking of journals to assess the quality of papers, but in other regions of the world, these rankings are not always implemented by local journals.

Further, it is important to improve the visibility of research from Latin America (and probably other emerging economies) and enable scholars to make recommendations for practitioners and policymakers. For this, partnerships between universities, research institutes and between the public and private sector should be developed by various means such as by sharing resources and publishing in English. To develop a more comprehensive and holistic understanding of complex SCs, cross-cultural and cross-country research studies should be developed considering different levels of analysis. Widely spread global SC elements should also be considered, along with attention to the local elements in all contexts/sectors/countries in which the research has been developed.

In a similar way, to reach a more adaptable conceptualisation on SCS, it is necessary to rethink the approach of sustainability and SCM. Beske and Seuring (2014) suggested that the two topics are complementary, but they still follow the traditional perspective of the SCM concept. However, as stated by Burgess *et al.* (2006, p. 716), "SCM involves engagement of people from different backgrounds, occupational groupings, geographical locations and cultures". This point of view demonstrates a challenge: it is possible to develop a psycho-sociological approach to operations management beyond maintaining the traditional perspective. For advanced SCS studies to reach maturity, more multi-theoretical, multi-methodological and multi-discipline perspectives are needed. Scholars need to consider the complexity of sustainability and use other or enhanced epistemologies when considering SCM.

However, these suggestions for ways to study SCS pose some problems, which form a challenging future research agenda. For instance, how can researchers make different norms and values concerning sustainability meet in order to build sustainable SCs across developed and emerging economies? Is there any way to make SCs sustainable if sustainability has a different meaning in Western and emerging economies? Can sustainability as understood from a Western perspective be applied in other contexts, and if yes, is this really sustainable from an institutional perspective? Does this mean that efforts in global SCs shall not only focus on SC operations and SC members but also address issues that are external to the SC (e.g. infrastructures, poverty reduction, capacity building)? Is this really the role of an SC, or is it the role of the other stakeholders?

In practice, the findings clearly show the need for MNEs and other stakeholders to integrate sustainability practices that support the local development of communities and SMEs by reinforcing their competitive advantage and supporting their access to global markets. Hence, scholars need to find ways to integrate and assess the sustainability activities of SC members that support poverty alleviation within and outside the SC. For instance, the creation of cooperatives in Latin America has been highlighted as a way to represent SMEs better and to build capacity among the informal sector so that small business activities can be formalised and contribute to the economy as well.

As Felzensztein *et al.* (2014) argued, the development of cooperatives is also applicable in the context of public policies that aim to increase the local and international competitiveness of SMEs in Latin America. In this regard, researchers and practitioners could learn more

about SCS in Latin America by investigating the focus of public policies. For instance, the Bolivian Government developed a vision for sustainability called *Vivir bien* ("Live well"), the aim of which is to alleviate poverty in the respect of nature and promote a collective well-being as opposed to capitalism. This opens the door to other challenges, as such government visions face difficulties in their implementation because of different elements in the institutional context, i.e. bureaucracy, centralisation of power and authority, a discipline fuelled by repression, and instability (Ranta, 2017). This reinforces the argument that SCS in Latin America and probably in other emerging countries needs to integrate the institutional environment, the culture and the local stakeholders, as presented in the current framework. For example, public–private partnerships involving government agencies, companies and civil society could support such intercultural and inter-institutional challenges for SCS by addressing the infrastructure gap (World Bank, 2017).

Limitations
This literature review has some limitations related to the Latin American databases that were used to identify the articles in the review. The four main Latin American databases were used; thus, relevant contributions from other local databases may have been missed. Opportunities for further research might be established by integrating the literature from databases outside of Latin America, but they were not within the scope of this research. Also, during the research process, working papers or conference papers were not included, and these may also contain information on specific characteristics of SCS in Latin American publications. Another limitation is the need to further clarify what the sustainability dimensions can offer and to compare definitions and indicators for SCS. However, few papers took a fundamental stance from the Western perspective; this requires more empirical research. Despite these limitations, the research conducted in the region of Latin America can clearly contribute to the field of (global) SCS.

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