# Social multi-tier supply chain management: empirical insights from the Brazilian garment sector

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#### Abstract

Current debates are even more requiring emphasis on social issues applied to supply chains since it still is the forgotten dimension. To address this lack, this paper aims to propose the social multi-tier supplier management (SMSM) based on social practices implemented in a local supply chain within the garment sector in Northern Brazil. We use the social capital theory as the theoretical lens to reach the proposal by carrying out a case study. Three different tiers were covered by our research focusing on seventeen practices found out in the literature. Findings demonstrate that so far it still is necessary a more relational interaction among supply chain members, since a friendship and informal communication exist in the sector but do not address the multi-tier perspective. The study contribute bringing elements from the social theory to manage supply chains.

**Keywords:** Sustainability, Social practices, Multitier perspective.

#### Introduction

There is strong recognition in the Sustainable Supply Chain Management (SSCM) literature that to date there has been an emphasis on economic and environmental performance (Ashby et al., 2012), and a lack of debate or empirical research on how to address major social issues throughout the supply chain. According to Ahi and Searcy (2013), there are at least twelve "definitions" on the perspective published within this decade, however there is no theoretical evolution of SSCM, which is the more widespread expression on the topic. From this discussion, it is clear that more than creating new concepts and/or definitions; it is necessary to evolve the field through a new approach that carries both theoretical and methodological consistence.

Debates on social sustainability have being developed to understand this bottom line of the concept; however, there is still a requirement for more research. Vallance et al. (2011) point out that social sustainability is possible when three different strategies emerge, namely: development (e.g. to reduce poverty, create social capital), bridge (e.g. to create a behaviour change concerned with the environment) and maintenance (e.g. regarding social and cultural patterns in the social-economic environment). Following

that perspective, to study Supply Chain Management (SCM) it is necessary to consider the development strategy, which is more aligned with the current literature. Usually the research about social issues in SCM are focused on social responsibility (e.g. Ciliberti et al., 2008; Markley and Davis, 2007); however other elements should be also analysed such as supplier development, as presented by Yawar and Seuring (2015).

Social capital is also recognised as a key component in a development strategy and is defined as the 'sum of the actual and potential resources within, available through, and derived from the network of relationships by an individual or social unit' (Nahapiet and Ghoshal, 1998, p.243). Social Capital Theory is considered a useful perspective for theorising the nature of connection and cooperation between firms (Starkey and Tempest, 2004), and therefore has strong relevance for social sustainability and SCM research. Social capital affects organisational processes (Jansen et al., 2011) and differs from financial, physical, human and organisational capitals as it is not located within a certain place, but embedded in relationships (Kontinen and Ojala, 2012).

There is an emergence of the multi-tier perspective in the Sustainable Supply Chain Management (SSCM) literature that to date is considering more the direct influence from the focal company, stakeholder pressures and the distance among supply chain members (Tachizawa and Wong, 2014). However, there is an emphasis on economic and environmental performance i.e. green multi-tier supplier management (Dou, Zhu and Sarkis, 2017), and still a lack of debate or empirical research on how to address major social issues throughout the supply chain.

In response, even noting that is still unclear how to address some supply chain practices this paper aims to propose the social multi-tier supplier management (SMSM) based on social practices implemented in a local supply chain within the garment sector in Northern Brazil. It produces many popular garment products, and there are several changes currently occurring in this cluster that are influencing its supply chain activities. Using the multi-tier approach (Mena et al., 2013) in conjunction with SCT as the theoretical lens the highlight of social practices is applied to understand how intra and inter-organisational practices may assume that.

# Social practices and sustainable supply chain management

According to Golicic and Smith (2013), the practice of sustainability is an important consideration in business and supply chain management as it can strongly influence the company relationship with key stakeholders. For Beske and Seuring (2014, p.323), "every company would have the chance to transform their supply chain into a (more) sustainable one". In fact, as presented by Krause et al. (2009), a company is no more sustainable than its supply chain. Sustainability as a practice emerges as a result of a sharing of beliefs and behaviour of a same group toward to maintain a same institutional logic (Silva and Figueiredo, 2017). According to these authors once sustainability emerges as a verb within an ongoing organisational process it is possible to debate about practices and real-world changes.

According to Touboulic and Walker (2015, p.21), "future research efforts could seek to develop our understanding of the implementation process of SSCM by framing it as transformation/change in organisational practice". For instance, Beske and Seuring (2014) proposed a broader discussion using categories and practices that can facilitate the analysis of SSCM. According to these authors, this is possible in three hierarchical levels: Strategic values, Structure, and Process. It is achieved by using elements from

the categories of orientation, continuity, collaboration, risk management and proactivity. However, it is also necessary to emerge another approach that considers not only the final performance, but also the practice used to achieve the SSCM.

Under this context, we use the debate about social practices to SSCM. Considering that an ongoing organisational process emerges, to introduce social issues within some pathways are necessary, and these pathways are defined here via the social practices that can receive different definitions. Glavic and Lukman (2007) claims that to reach social sustainability, societal principles should be observed as follow: social responsibility, health and safety, polluter pays principle, and reporting to the stakeholders. In parallel Ashby et al. (2012), Ciliberti et al. (2008), Köksal et al. (2017) and Yawar and Seuring (2015) point out that the elements necessary are: social responsibility, health and safety and supplier development. We consolidate these social practices from multiple authors and employ them as the framework for this research, as presented in Table 1.

Table 1: Social practices to SSCM

| Social practice                 | Description   |
|---------------------------------|---|
| Corporate social responsibility |   |
| Slavery labour                  | Concerns about work developed avoiding the use of forced labour   |
| Child labour                    | Concerns about work developed avoiding the use of forced fabour  Concerns about work developed by children under the age of 15 that |
| Cilità laboui                   | prevents school attendance and work by children under the age of 18   |
|                                 |   |
| T11 1 1 . 1                     | that is hazardous to the physical or mental health of the child   |
| Illegal labour                  | Concerns about work developed looking for avoid to infringe the   |
| That : 11 1 :                   | local labour legislation  |
| Ethical behaviour               | Organisational contribution to the economic development aiming to   |
|                                 | increase the environmental quality and the quality of life of society.  |
| Philanthropy                    | Refers to philanthropic activities working with local communities   |
|                                 | supporting poverty reduction  |
| Unfair wages                    | Refers to the correct payment of wages according to the effort used   |
|                                 | during their daily labour   |
| Minority development            | The development of those populations who are considered   |
| -                               | minorities in terms of population by the virtue of their religion, race   |
|                                 | and ethnicity   |
| Disabled people inclusion       | Those groups who are mostly neglected in the societies due to   |
|                                 | physical inabilities and those who are left out or neglected by the   |
|                                 | government.   |
| Marginalised people inclusion   | Population living below the poverty line is considered marginal   |
| Gender                          | Gender equality refers to the equal treatment of women and  |
|                                 | transgender, catering to their special needs and assigning equal  |
|                                 | rights at the work place  |
| Health and safety               |   |
| Labour condition                | Working conditions of the employees includes low wages, extended  |
|                                 | hours of working, right to form unions, contract labour and   |
|                                 | exploitation of the employee  |
| Work schedule                   | Refers to the compliance with applicable laws and industry standard   |
|                                 | on working hours and breaks   |
| Awards                          | Award practice for employees to stimulate organizational  |
| 11,, 41,00                      | recognition practices   |
| Supplier development            | 10  |
| Type of relationship            | Refers to how companies are developing their relationships such as  |
| Type of foliationismp           | transaction and collaboration   |
| Trust                           | Refers to the degree of commitment between focal companies and  |
|                                 | other supply chain members  |
| Supplier assessment             | Any activity by the focal company related to the evaluation of  |
| Supplier assessment             | suppliers such as audits  |
|                                 | suppliers such as addits  |

| Supplier selection | Any activity by the focal company which refers to select new |
|--------------------|--|
|                    | suppliers  |

Source: Ashby et al. (2012), Ciliberti et al. (2008), Köksal et al. (2017), Yawar and Seuring (2015)

Social capital is generated through Corporate Social Responsibility (CSR) practices and its power comes from a focus on the positive outcomes of sociability; a key benefit of social capital is that it lowers transaction costs (Spence and Schmidpeter, 2003) through the trust and mutual benefit that an organisation develops with its suppliers, and it contributes to information sharing and strategic decision making in the supply chain (Jansen et al., 2011). The more closed and dense the supplier network an organisation operates better the information sharing and greater the levels of trust, leading to more cooperation and potential collaboration (Kontinen and Ojala, 2012) and stronger social capital. SCT has 3 dimensions, namely Structural, Cognitive and Relational; the Relational dimension refers specifically to the 'trust, obligation, and identification present between actors in a relationship' (Nahapiet and Ghoshal, 1998, p. 251), the types of (often personal) relationships developed through a history of interactions and the strength of the relationship built over time (Villena et al, 2011). Key aspects are respect, friendship and trust, with the latter referring to the expectation that both parties will behave in a mutually acceptable manner.

Beyond the debate around what practices could be developed it is necessary to pay attention on how this happen. Since it is required to observe the practices throughout the supply chain, from the last years emerged the multi-tier perspective in the way to stimulate a more integrative approach in the supply chain. The analysis of the multi-tier perspective shows how focal companies can integrate sub-suppliers in their activities (Tachizawa and Wong, 2014), which can also be related to sustainability and from the reconceptualisation of the supply chain. However, as presented by Mena et al. (2013) and other authors in SSCM, the economic dimension of sustainability have a little relevance when social and environmental dimension are more difficult to be observed. That could happen in developed countries, but also in developing countries in which the economic dimension has a great impact in how to reach sustainability practice. However, in the current proposal we seek to demonstrate that the multi-tier approach can happen via social practices, which has directly influence in the other bottom lines.

### Research Method

This research is based in a qualitative approach. A case study was carried out to investigate social practices that can be performed and shared within a locally based garment supply chain. According to Gibbert et al. (2008), the case study is a tool to generate and test theory, which is the focus of the current proposal. To enable a rich and multi-faceted view of the implementation of social practices different supply chain members were interviewed to include five manufacturers, three suppliers and two customers. The interviews were recorded and transcribed to ensure the reliability of the study. The research was developed in the garment cluster in Brazil located in Fortaleza the fifth-largest Brazilian capital in the northern region.

Data collection was carried out from June to November 2017 with interviews and technical visits. Personal interviews were developed with managers or owners according to their availability. Content analysis was conducted based on seventeen practices to understand three different categories, namely (1) corporate social responsibility (CSR); (2) Health and Safety (H&S); and (3) Supplier development strategies (SDS) (Ashby et

al., 2012; Köskal et al., 2017; Yawar and Seuring, 2015). Additionally, in order to propose a definition for SMSM, we employ elements from Social Capital Theory (SCT) to support our current arguments. The information was used to create more validity for the data collected and to identify the empirical results to support the research developed and seek to better understand the relation of what is being observed and questions related to social practices in SSCM.

# **Findings**

The garment cluster of Ceará state currently occupies the fifth position in the Brazilian industry ranking. Its focus is to produce fast fashion, which is recognised to have significant impacts regarding both environmental and social sustainability. It is epitomised by micro and small companies that perform specific functions within the supply chain, and the trend is for focal firms to outsource their production to a number of different suppliers. The findings indicate that focal companies and suppliers within the cluster are very aware of each other and there is extensive informal communication across the cluster. Some companies and suppliers have known each other for almost 20 years and there was evidence of very personal relationships.

Table 2: Empirical findings about social practices

| Social practice                 | Quotes   |  |
|---------------------------------|--|--|
| Corporate social responsibility |  |  |
| Slavery labour                  | I heard about already! I even know brands that have slavery labour, I cannot speak in names, but they do. However, they are not from Fortaleza, but are other states, famous brands right? That really is this slavery work with employees (Company 5)   |  |
| Child labour                    | No, I never heard about child labour in the manufactures!! (Company 3 and Supplier 1)  |  |
| Illegal labour                  | Yes [heard about illegal labour]. There is too much. But Here is normal the informal job, which pays nothing, does not pay the cost, does not pay There is too much, but it is not our case (Company 1)  |  |
| Ethical behaviour               | Yes [believe that its company it is important to the society]. Because there is a lot of unemployed family. Considering that we are supporting unemployment reduction, right? (Company 3)  |  |
| Philanthropy                    | We make donation to thrift stores in different institutions such as Lar Torres de Melo, which is responsible for elderly These things. Always we support them, always, always! (Company 2)   |  |
| Unfair wages                    | We pay fair wages, I guess. I always debated long before I received. "It's so much!", "No, so much for me!" That's exactly what happen It's good for me, because it is only good when both sides win, right? (Supplier 3)  |  |
| Minority development            | If the person is capable we hire any kind! (Company 4)   |  |
| Disabled people inclusion       | I never hire disabled people. But if in the future that is possible, I have no problem doing it. (Company 3)   |  |
| Marginalised people inclusion   | We hire [marginalised people]! Because we have a social project to reintegrate them into the society []. Some employees were prisoners, other thief, today are no more. Today, for example, my husband has greatest confidence to keep money to him in high values, he was a thief, he robbed a house. (Company 5) |  |
| Gender                          | No way [have trouble hiring different gender], I work with them here! I have stylists, I have dressmakers, who are the man [usually in Brazil woman works on it] and I do not have any problems. (Company 4)   |  |
| Health and safety               |  |  |

| Labour condition     | We provide working conditions, but our outsourced supplier has not   |
|----------------------|--|
|                      | so a great plant [which can influence on it]. I visited everything   |
|                      | Even from Maranguape and that was quite large and that apparently    |
|                      | has good working conditions. (Company 1)                             |
| Work schedule        | Not [aware of work schedule in the outsourced suppliers] because     |
|                      | they work by production, right? The production even faster the       |
|                      | better for them, right? I do not have contact about it. (Company 3)  |
| Awards               | Certainly! The employees have awards! Every month when the           |
|                      | company hits its goal, we give them more money into account, for     |
|                      | them to be aware of the goal. (Company 5)                            |
| Supplier development |  |
| Type of relationship | We travel to visit some suppliers, we go until the suppliers Many    |
|                      | times we will properly make purchases Thus, you're having this       |
|                      | closer relationship with them. (Company 1)                           |
| Trust                | I go to get paid, because sometimes, I do not have to pay into my    |
|                      | account, then I get its payment done in cash. [] Because I've been   |
|                      | cheated twice! Then you know that when the person is cheated two     |
|                      | or three times (Supplier 2)  |
| Supplier assessment  | Yes! Outsourced supplier, like dressmakers who produces pieces!      |
|                      | One people visit to see how it is done in the process, right? In the |
|                      | manufacture of a piece. (Company 2)                                  |
| Supplier selection   | The only criterion is the quality of the piece! (Company 4)          |
|                      |  |

From the data presented, there is concern that some criteria such as do not have slavery, child and illegal labour are not addressed, however it is recognized that these practices could exist in the region, but are more likely to be related to famous brands. The cluster in Fortaleza is focused on popular garment manufacturing i.e. more related to the base of pyramid. Thus, considering a cultural element from the region there is significant engagement to ensure that the relevant laws are met. Other elements emerged to maintain long-term relationships with suppliers. Since there is a majority of family-based enterprises, during the business relationship sometimes there is a shift from only being a supplier and being integrated into the friendship or family zone, as indicated by four of the interviews.

The results demonstrate that through intra-organisational practices (i.e. corporate social responsibility and health and safety) appropriate social practices (e.g. working conditions, human rights) are performed. This aligns with the results of Köksal et al. (2017) regarding what have been studied around the world. Additionally, via internal enablers one of the local industries demonstrated minority development, including employing marginalised people in their operations. That manufacturer is an exception since usually these people are not considered to be hired.

However, regarding supplier development strategies several problems were observed from the purchasing member; this pattern was observed from industries to suppliers, and also from consumers to industries. Clearly, there are no supplier selection or assessment criterion based on elements other than quality and price. This demonstrates that the economic dimension is the most important in the current context of the cluster and aligns with both SSCM research literature and practice (Ashby et al., 2012).

In addition, while the trust that SCT so strongly advocates was observed from the manufacturer's side, when asking suppliers within the cluster it was much less than expected, as illustrated by the quote in Table 2. While many of the practices in the cluster are informal in nature some suppliers clearly felt that the focal companies were not treating them fairly, particularly in relation to payment. There was evidence of long-term relationships as many firms and suppliers had been working within the cluster for

up to 20 years, but most remain focused on transactional practices. They interact frequently with each other and firms visit their suppliers regularly, but despite the long period of interaction this has not developed into the collaborative relationships needed to achieve SSCM (Beske and Seuring, 2014).

This suggests that the relational dimension of social capital is still under-developed and prevents the information sharing and greater the levels of trust that can lead to more cooperation and potential collaboration (Kontinen and Ojala, 2012). From the findings, it is also observed that each supply chain member is concerned about their own social practices, and therefore does not consider what is being developed or implemented by other members, further emphasising a lack of information-sharing.

In order to enable social practices in the supply chain it is necessary to consider both internal and external factors. Similar to Dou, Zhu and Sarkis (2017) it is possible from our selected practices to separate how companies can manage their sub-suppliers and advance in the social management perspective. It is relevant to highlight that the empirical results are only insights to our proposal, thus we believe that we contribute to both the social management perspective and the multi-tier approach. According to Wilhelm et al., 2016 the focal company control and influence of sub-suppliers can facilitate the emergence of a sustainable supply chain.

Thus, by focusing specifically on social practices we believe that is possible to apply and evolve the social capital perspective in supply chains. Supply Chain Management literature has applied SCT to examine the characteristics of buyer–supplier relationships, their impact on performance and the wider network and stakeholders (Matthews and Marzec, 2012), but this lens has been underemployed in SSCM. We believe that our seventeen practices reflect what has been used in the literature to date, and are also demonstrated by the empirical research, which can facilitate the advance of the debate on SSCM. Therefore, the social multi-tier supplier management (SMSM) is only possible where companies are having social practices and overflowing those practices throughout the supply chain via a relational and collaborative approach. Using these elements facilitate more empathy and more engagement.

### **Final Remarks**

From the empirical results, it is clear that the social practices performed are based on individual motivations and are lacking the effective relationship among supply chain members. The findings demonstrate that social multi-tier supplier management (SMSM) is a requirement in order to address social sustainability. During the research different tiers were studied and they show a trend toward a more relational perspective even if it was not clearly observed in the results. Since a SCM approach emerges following that perspective, there is more chance to facilitate the SSCM. Through analysing social practices using a multi-tier perspective, this paper contributes to the study of social management in supply chains, and demonstrates how these practices are implemented and can support the pathway to a balanced response to sustainability.

From these results, there are two main contributions: (1) theoretically, we can identify that it is necessary to increase the debate on multi-tier perspective mostly trying to introduce the social sustainability as an effective part of the supply chain. Also, we demonstrate that SCT is relevant to comprehend how relations and partnerships are emerging, and (2) for practitioners there is the indication that it is even more necessary to increase the partnership among the supply chain members; this can encourage social

sustainability by spreading their own practices based on real-solving problems perspective. Future debates should emerge on how to engage more supply chain members by assuming sustainability as an expected and embedded practice. Also, the use of other social theories can bring up more elements to ratify the existence of a social multi-tier supplier management (SMSM).

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#### Reference

- Ahi, P. and Searcy, C. (2013), "A comparative literature analysis of definitions for green and sustainable supply chain management", *Journal of Cleaner Production*, Vol. 52.
- Ashby, A., Leat, M. and Hudson-Smith, M. (2012), "Making connections: a review of supply chain management and sustainability literature". *Supply Chain Management: An International Journal*, Vol. 17, No. 5, pp. 497-516.
- Beske, P. and Seuring, S. (2014), "Putting sustainability into supply chain management", *Supply Chain Management: an international journal*, Vol. 19, N. 3, pp. 322-331.
- Ciliberti, F., Pontrandolfo, P. and Scozzi, B. (2008), "Investigating corporate social responsibility in supply chains: a SME perspective", *Journal of Cleaner Production*, Vol. 16, N. 15, pp. 1579-1588.
- Dou, Y., Zhu, Q., and Sarkis, J. (2017), "Green multi-tier supply chain management: an enabler investigation". *Journal of Purchasing and Supply Management*, http://dx.doi.org/10.1016/j.pursup.2017.07.001
- Gibbert, M., Ruigrok, W., and Wicki, B. (2008), "What passes as a rigorous case study?", *Strategic Management Journal*, Vol. 29, N. 13, pp. 1465-1474.
- Glavič, P. and Lukman, R. (2007), "Review of sustainability terms and their definitions", *Journal of Cleaner Production*, Vol. 15, N. 18, pp. 1875-1885.
- Golicic, S.L. and Smith, C.D. (2013), "A meta-analysis of environmentally sustainable supply chain management practices and firm performance", *Journal of Supply Chain Management*, Vol. 49, N. 2, pp. 78-95.
- Jansen, R. J. G., Curseu, P. L., Vermeulen, P. A. M., Geurts, J. L. A. & Gibcus, P. 2011. Social capital as a decision aid in strategic decision-making in service organisations. *Management Decision*, 49, 734-747.
- Kontinen, T. & Ojala, A. 2012. Social capital in the international operations of family SMEs. *Journal of Small Business and Enterprise Development*, 19, 39-55.
- Köksal, D., Strahle, J., Müller, M. and Freise, M. (2017), "Social Sustainable Supply Chain Management in the Textile and Apparel Industry A Literature Review". *Sustainability*, Vol. 9, No. 1, pp. 100.
- Krause, D. R., Vachon, S. and Klassen, R. D. (2009), "Special Topic Forum on Sustainable Supply Chain Management: introduction and reflections on the role of purchasing management", *Journal of Supply Chain Management*, Vol. 45, N. 4, pp. 18-25.
- Markley, M. J. and Davis, L. (2007), "Exploring future competitive advantage through sustainable supply chains", *International Journal of Physical Distribution & Logistics Management*, Vol. 37, N. 9, pp. 763-774.
- Matthews, R. L., and Marzec, P. E. (2012). "Social capital, a theory for operations management: a systematic review of the evidence". *International Journal of Production Research*, 50 (24), pp. 7081-7099.

- Mena, C., Humphries, A., and Choi, T. Y. (2013). "Toward a theory of multi-tier supply chain management". *Journal of Supply Chain Management*, vol. 49, no 2, p. 58-77.
- Nahapiet, J. & Ghoshal, S. 1998. Social capital, intellectual capital, and the organisational advantage. *Academy of Management Review*, 23, 242-66.
- Silva, M. E. and Figueiredo, M. D. (2017), "Sustainability as practice: Reflections on the creation of an institutional logic". *Sustainability*. Vol. 9, N. 10, pp. 1839.
- Spence, L. J. & Schmidpeter, R. 2003. SMEs, Social Capital and the Common Good. *Journal of Business Ethics*, 45, 93-108.
- Starkey, K. & Tempest, S. 2004. Bowling along: strategic management and social capital. *European Management Review*, 1, 78-83.
- Tachizawa, E., and Wong, C. (2014). "Towards a theory of multi-tier sustainable supply chains: a systematic literature review". *Supply Chain Management: An International Journal*, vol. 19, no 5/6, p. 643-663.
- Touboulic, A. and Walker, H. (2015), "Theories in sustainable supply chain management: a structured literature review", *International Journal of Physical Distribution & Logistics Management*, Vol. 45, N. 1/2.
- Vallance, S., Perkins, H. C. and Dixon, J. E. (2011), "What is social sustainability? A clarification of concepts", *Geoforum*, Vol. 42, pp.342-348.
- Villena, V.H., Revilla, E. & Choi, T.Y. 2011. The dark side of buyer–supplier relationships: A social capital perspective. *Journal of Operations Management*, 29, 561-576.
- Wilhelm, M., Blome, C., and Wieck, E. (2016). "Implementing sustainability in multi-tier supply chains: Strategies and contingencies in managing sub-suppliers". *International Journal of Production Economics*, vol. 182, p. 196-212.
- Yawar, S. A. and Seuring, S. (2015), "Management of social issues in supply chains: a literature review exploring social issues, actions and performance outcomes". *Journal of Business Ethics*, pp. 1-23.