

# **Social sustainability practices and operations management: an empirical study of Italian equestrian centres**

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## **Abstract**

Although implementing social sustainability practices surely affects the operations and supply chain management of the company very few researches in the field of OM and SCM have been dedicated to this topic. Grounding on the literature on social sustainability and looking at the context of equestrian centres, where activities related to Therapeutic Horseback Riding (THR) and other social sustainable practices are very common, this paper offers a number of theoretical argumentations and empirical analysis about how being social sustainability oriented (or just adopting one or few social sustainability practices) may affect the operations of a company and, in turn, influence firm's performance.

**Keywords:** Social Sustainability; Operations Management in Sports; Therapeutic Horseback Riding.

## **Introduction**

This research deals with the topic of Social Sustainability in Operations Management. The importance of the social sustainability theme has increased in several industrial contexts, as proved by the impressive growth of the adoption of corporate social responsibility practices over the past two decades (Carter and Rogers, 2008). *“Businesses are increasingly paying more attention to the social dimension of sustainable development, mainly due to an experienced shift in stakeholder pressures from environmental - to social-related concerns”* (Labuschagne et al., 2005, p. 378).

Although implementing social sustainability practices surely affects the operations and supply chain management of the company (think, for example, at the way in which ensuring fair working conditions may require changes in the work environment or at the way in which new suppliers have to be selected from the Fair Trade) very few research in the field of OM and SCM has been dedicated to this topic. In contrast, most of the papers in OM literature deal with the economic and environmental pillars of sustainability without explicit considering the social aspects (see the sustainability model proposed by Carter and Rogers, 2008). For instance, some scholars are observing that companies who adopt social sustainable OM practices are able to build reputation, exploit visibility and enhance global performance (Klassen and Vereecke, 2012). However, the literature on social sustainability still remains *“somewhat chaotic and sometimes contradictory or confusing”* (Vallance et al., 2011, p. 345). Also, the

majority of models employed for the study of social issues in operational contexts are mostly conceptual (Brandenburg et al., 2013).

We wish to contribute to the OM literature on sustainability by presenting the results of an empirical research, which explores the motivations that push managers to implement social-related activities within their companies and the impact that such choice has on operations settings and on performance.

## **Theoretical background**

### *Social sustainability and operations management*

The prevalent idea in the studies of social sustainability has been to connect this issue with the economic and, above all, the environmental one (Wu and Pagell, 2010). But many authors affirm that they interrelate differently for different organizations. We have reviewed lot of articles in this field and identify the different research streams in social sustainability literature. One of the most investigated is Corporate Social Responsibility (CSR). It comprehends various “sub elements” concerning cultural and political issues as social homogeneity, equitable incomes and access to goods, services and employment but also labour practices, occupational health and safety, child labour and human rights (Hahn and Kühnen, 2013). The larger companies use to report their degree of CSR following social performance standards and guidelines including ISO14000, Social Accountability (SA) 8000, ISO26000, AccountAbility1000, OECD Multinational Enterprises, Dow Jones Sustainability Index (DJSI) (2008), the United Nations Global Compact, and World Business Council for Sustainable Development (WBCSD) initiatives (Hahn and Kühnen, 2013; Lee and Saen, 2011). CSR practices contribute to the overall sustainability of the company and are evaluated as such, but are not part of a company’s core business or operational activities (Labuschagne et al, 2005).

Another research stream regards social sustainability in terms of “liveability”. Godschalk (2004) juxtaposes residents’ search for liveable cities with the development of urban economies. Following this thought, the aim of a company to be social sustainable is related to its capability to offer to the community social benefits and improve the social texture of urban environments. In order to pursue this intent, many companies are born as “Social Enterprises”, “Non-profit”, co-operatives, and so on, and are used to organize social events, carrying out charity, donation activities, and other social activities (Dart, 2004).

The social pillar in the operations context has been studied especially at the supply chain level, in different terms, since it considers the product from initial processing of raw materials to delivery to the customer. The first question that echoes in literature is “why companies should care of social issues?”. Wolf (2013) suggests that coercive pressures are progressively coming from customers, suppliers, competitors and governments. This derives from the concept of transparency: “Increasingly, local communities and external stakeholders are demanding that corporate practices become more visible and transparent” (Hart, 1995). Firms are asked to take care of employee health and safety, operate in a wise and responsible manner and preserve the quality of life of the external community. “As Operations is one of the areas employing the most personnel and having the highest footprint and impact on the external community, it can have a significant effect on sustainability’s social dimension” (Gimenez et al., 2012, pag 149).

The on-going research is witnessing that companies who adopt social practices could also reach economic advantages and performance improvement (Pullman et al., 2009). This concept accords with Carter and Rogers’ (2008) hypothesis according to which “Firms that strategically undertake Sustainable Supply Chain Management will achieve

higher economic performance than firms that pursue only one or two of the three components of the triple bottom line”. Social sustainable operations management leads to build reputation, exploit visibility, enhance global performance, but opens operations to greater public scrutiny and therefore risk (Hart, 1995). Klassen and Vereecke (2012) proclaim the different sides of social sustainability in OM: capabilities, responsibility, and risk. Capabilities in operations denote all changes and adaptations in processes, structures and decision making to achieve and maintain the socio-compatible level of a company; responsibility in OM represents moral, legal and political conduct, in agreement with society norms and expectations, inside and outside the firm and its supply chain; operational risks concern variance from an expected outcome (e.g., financial risk-return), value at risk (e.g., downside portfolio risk), or expected loss from internal or external process failures or disruptions.

#### *Motivations behind being social sustainable*

Regarding the motivations that push companies to carry out social sustainability practices, we identify two main streams of research: one affirms that companies are motivated from stakeholders and community pressure (Wolf, 2013; Hahn and Kühnen, 2013; Labuschagne et al, 2005; Lee and Saen, 2011); the other states that the main reason that leads them is obtaining a competitive advantage (Carter and Rogers, 2008; Pullman et al., 2009).

Stakeholders comprehend employees, customers, suppliers, creditors, advocate groups, public authorities, and so on (Hahn and Kühnen, 2013) and their interests determine the success of an organization (Laplume et al., 2008). Stakeholders pilot corporate sustainability strategies: the more they are important for the company, the heavier will be their influence on decision-making (Darnall et al., 2010). Diverse authors sustain that also non-governmental organizations, media or local communities exert pressure on companies (Labuschagne et al, 2005; Wolf, 2013).

Adopting social practice could lead obtaining different competitive advantages: first of all it is a “difficult-to-replicate” practice for companies and their suppliers (Carter and Dresner, 2001); social sustainability confers product/service differentiation and, at a certain degree of implementation, inimitability (Pullman et al., 2009). Moreover a social-sensible firm is able to enhance its reputation among suppliers and customers (Ellen et al., 2006), potential employees (Capaldi, 2005), and shareholders (Klassen and McLaughlin, 1996).

#### *Social Sustainability Practices (SSP)*

Following previous social sustainability literature, we classify social practices into three branches of interest: Internal, Supply Chain and External levels. Our classification is an adaptation of Klassen and Vereecke, (2012) who describes the internal level of social sustainability as the internal operational and management level, which captures such aspects as workforce diversity and safety management. We extended this level to the all set of CSR practices. We name the social sustainability supply chain level, what in Klassen and Vereecke (2012, 104) is defined as “inter-firm level that captures external interactions where strong economic ties connect firms, i.e., buying firms, suppliers, consumers and end-users”. Finally the external level of social sustainability is related to external stakeholders, such as communities, regulators, NGOs, and society in general.

Different social practices can be found within each level (internal, supply chain and external). At the internal level, we find practices such as ensuring gender and ethnic equality among employees, fair working conditions and remuneration, hiring former inmates or immigrants and other typical CSR practices (Awaysheh and Klassen, 2010).

At the supply chain level we find practices such as choosing social sustainable suppliers or offering reduced rates for needy customers (Lee and Saen, 2011; Carter and Rogers, 2008; Pullman et al., 2009; Brandenburg et al., 2013; Hassini et al., 2012). At the external level we find all the community-oriented and social-well-being practices such as joining anti-corruption programs, operating as a socio-educational centre, voluntary service, charitable activities and so on (Dart, 2004).

#### *Social sustainability and performance*

Many authors have studied and showed diverse effects on performances due to the adoption of social sustainability practices. Adopting sustainability practices could, for example, improve the company's image, creating brand preference and increasing profits. Barnett and Salomon (2012) affirm that firms with highest social sustainability practices implementation achieve highest financial performance; the link between social and the other pillars practices with financial performance is well studied by different authors in the literature (Parmigiani et al., 2011; Bai and Sarkis, 2010; Carter et al., 2000; Carter and Roger, 2008).

#### **Research Method**

We study this topic within the context of sport industry, where the attention to social issues is something well established. Specifically, our focus is on Equestrian Centres, where activities related to Therapeutic Horseback Riding (THR) and other social sustainable practices are very common.

After having conducted a literature review on social sustainability and OM, we run three explorative interviews to three companies belonging to the equestrian industry in Italy. From these interviews new concepts and linkages among constructs came out, as it will be discussed in the next section.

Also, we tested the resulting conceptual model by analysing data from 156 Italian equestrian centres (from a total population of 1576 centres), contacted thanks to the collaboration and involvement of the Italian Federation of Equestrian Sports (FISE) and its regional committees.

The protocols we followed in the two research phases, the analyses and main findings are reported in the next section.

#### **Analysis and Findings**

##### *The explorative analysis (preliminary interviews to three equestrian centres)*

We conducted three in-depth interviews in order to analyse into more details the concepts we presented in the literature section and to explore if specific new constructs related to social sustainability and new relationships among them can be hypothesised in the field of sports, and in particular the equestrian centres.

In Italy the equestrian industry is lead by the FISE (Italian Federation for Equestrian Sports), which counts more than 1500 affiliated centres. Each equestrian centre could affiliate to FISE for different disciplines, including THR or Paralympic ones. Beyond that, equestrian centres can also associate themselves to other minor Associations, e.g. ANIRE (Italian National Association for Therapeutic Horseback Riding) or AIDIRE (Italian Association for Hippotherapy and Horse-Rehabilitation). We run explorative interviews to three companies, which were different in terms of association they are affiliated to, the size (number of horses, number of associates, etc.), and the Italian Region they are geographically located in (north, centre, south of Italy). We selected these three companies with the aim at respecting the heterogeneity of the industry.

From this explorative phase, we found, first, that social sustainability can be deployed along 4 dimensions, namely: 1) Internal social activities (e.g. ensuring gender and ethnic equality among employees); 2) Supply chain social activities (e.g. choosing suppliers and collaborating companies that are part of the Fair Trade); 3) Society and external social activities (e.g. carrying out charitable and donation activities); 4) Social product/service differentiation activities (e.g. offering THR services). For sake of clarity, we here differentiate what we call “Social Product/Service” from “Social Sustainability Practices”. With “Social Product/Service” we mean an activity that provides social-benefits to customers and is profitable for the firm. For “Social Sustainability Practices” we mean non-directly profitable actions carried out by a firm through three levels (internal, supply chain and external) to reach social sustainability. Our intent in this study is: to catch what are motivations that lead an enterprise to offer to its customers a social product/service as THR and to carry out other social sustainability practices; to understand if offering THR leads the company to sensitize itself to develop other social sustainability practices; to understand the impact of offering a social product/service (such as THR) on company performances (financial and social). According to Lee and Saen (2012, pag. 223) “developing ‘green’ and environmentally friendly new product development will bring another source of competitive advantage such as increased sales, cost reduction, and product differentiation in commercial markets”. Adapting this to the social context, we intend to investigate if the same benefits are achieved through a social product/service. In fact, we expect that customers are willing to pay extra for a socially responsible product (Wu and Pagell, 2010).

Second, although offering a social product/service doesn’t necessary connote a social sustainable behaviour of a company (it may be just a profitable product differentiation business strategy) we found that offering THR may lead the company to sensitize itself to develop other social sustainability practices. We use the concept of Strategic Social Orientation of Gimenez et al. (2012, pag. 153) meaning the combination of a social product/service with a set of social practices conducted through the three levels. It may happen, in fact, that companies that offer social products and services will also carry out diverse social practices (internal, external and supply chain), thus triggering a sort of firm social behaviour. We speculate that firms aiming at social sustainability progressively carry out diverse social practices. In particular, we found different levels/degree of implementation of THR activities and it seems that the more THR is implemented, the more the other social sustainability practices are implemented as well.

Finally, the interviews suggested us the existence of a third motivation (namely, “Social Sensibility”) behind the adoption of social sustainability practices. In fact, we found that besides achieving competitive advantage (mostly in terms of visibility and reputation) and responding to external pressure (mostly from customers, media, and society) – these aspects have already been discussed in the literature – equestrian centres adopt social sustainability practices to meet owners and managers sensibility to social issues.

In conclusion, from the literature review and the explorative interviews we are now able to draft the following conceptual model, reported in Figure 1.

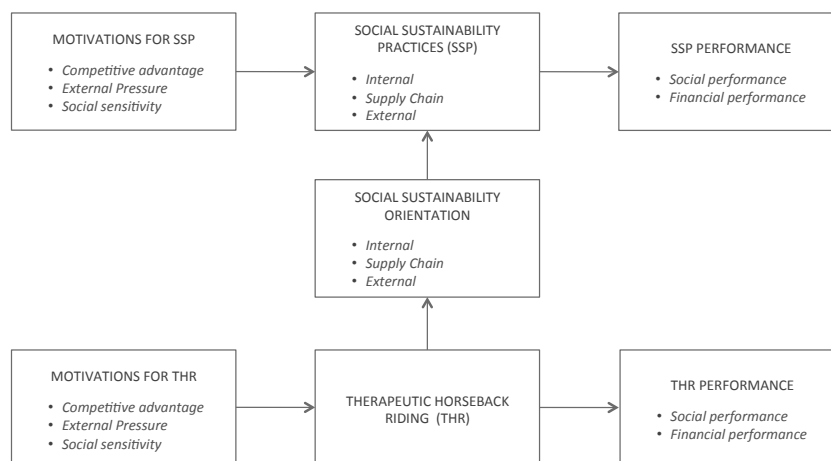


Figure 1. The conceptual model

### *The confirmatory analysis (survey)*

To design the questionnaire we used items adapted from the literature on social sustainability, from the explorative interviews, from the Sustainability Reporting Guidelines (G3), and from Social Accountability (SA) 8000. We got a response rate of 9.9% and collected data from 156 companies. We analysed data by structural equation modelling (SEM).

The structure of the questionnaire, the latent variables, and items we used are reported in Appendix A. In addition, we inserted a section for gathering respondent general and demographic information. In particular, we asked respondents to indicate every kind of THR disciplines they offer, based on the Italian Ministry of Health definitions; we asked respondents to indicate their level of social sustainability practices implementation on the three levels (internal, supply chain and external) via a five-level scale similar to that of Melnyk et al. (2003); we asked respondents about the motivations that pushed them to offer a social product/service and/or to implement social sustainability practices, and how they affect their financial and social performance; we finally asked about how much having implemented THR disciplines had pushed their propensity in implementing other social practices.

Survey respondents were generally the president or the owner of the centre, or the person in charge of THR disciplines, often the riding instructor. The survey has been submitted by emails to the entire population: 1576 equestrian centres differently affiliated. We collected answers from January 28, 2015, stimulating respondents with four reminder emails, after which we registered peaks of responsiveness. The survey was closed on March 5, 2015 with 156 questionnaire returned (response rate of 9,9%).

Equestrian canters are, by statute, non-profit organizations comparable to small-medium-size enterprises (SMEs). We have collected data about the number of horses and boxes, number of riding halls, employees and subscribers/customers (see table 1). Of the 156 respondents, 72 offer a social product/service to his customers; for the 60% of them THR is less than 25% of their core business, and for the 22% is between 25% and 50%.

Table 1. Sample Characteristics

	Means	SD
Number of Horses	24.67	18.03
Number of Boxes	31.16	30.33
Number of Riding Halls	2.49	1.16
Number of Employees	3.29	16.80
Number of Customers	63.18	42.82

We analysed our data by utilizing structural equation modelling using STATA 13. Based on two-step procedure, we first tested the measurement model (Confirmatory Factor Analysis) by including all the latent with their corresponding items and performed different measurement tests. Appendix A reports the items of the latent variables with their Cronbach's alphas, AVE (Average Variance Extracted) and CR (Composite Reliabilities) estimates. As shown in the appendix, the estimates of Cronbach's alphas are above the recommended value of 0.7. The values of AVE are all above the value of 0.5 while the estimates of composite reliabilities range from 0.78 to 0.88. AVE greater than 50% and RC greater than 0.70 provide evidences of good reliability for each latent (Choo et al., 2015). Then we proceeded to test the theoretical model already shown in Figure 1. The final results of our theoretical model analyses (the SEM output) are shown in Figure 2.

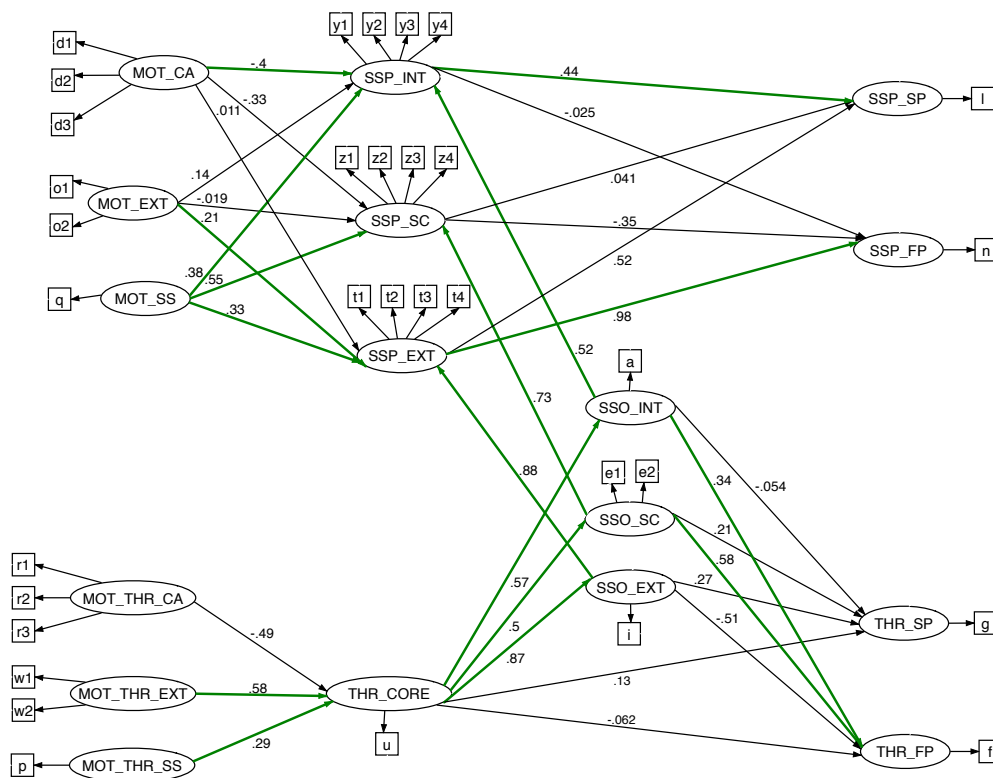


Figure 2. The SEM output.

From the confirmatory analysis we found different and interesting relationships between the adopted social activities, the declared motivation behind these, and the effects of such activities in terms of the financial and social performance of the equestrian centre. In addition, we found that equestrian centres that offer social products and services will also carry out diverse social practices (internal, external and supply chain), thus triggering a sort of firm social sustainability orientation.

In Figure 2, statistical significant paths ( $p < 0.05$ ) are reported in green colour arrows. In the following, we comment the SEM output by first focusing on the upper part of Figure 2, and then on the bottom part.

Regarding the social sustainability practices, we found that motivations related to achieving competitive advantage turn out to be significant only for internal social practices, while those related to respond to external pressures are significant only for external social practices. Contrarily, results indicate that the implementation of all social sustainability practices (internal, supply chain, and external) is much motivated by the

social sensibility of the owners and managers of the equestrian centres. Also, while supply chain sustainability practices seem not to effect performance, internal practices influence social performance of the centres while external practices influence financial performance.

Regarding the THR activities (offering a social product/service), we found that the main motivations behind it have to be searched in stakeholder external pressure and social sensitivity of the owner. Also, enough interesting, we found that implementing THR has not direct effect on performance. Conversely, social orientation has. This means that when THR triggers the virtuous attitude of the centre to implement other social sustainable practices, this will influence the centre’s performance.

Finally, probably the most interesting finding, results show that the higher the level of THR activities and services offered by the centres, the higher the social orientation attitude of the centres in implementing other social sustainability practices (internal, supply chain, external), and the higher the actual implementation of these practices.

### Conclusion

Empirical studies exploring the motivations and the consequences of adopting and implementing social sustainability practices are quite “chaotic” in management literature and almost inexistent in the OM and SCM literature. Contrarily, their adoption is wide spreading in most industries. And, nobody disagrees that this somehow may influence the way in which operations are conducted and managed, as well as performance. As an example, we analysed the case of Italian equestrian centres and found confirmation of this.

This study wishes to contribute to the OM literature on social sustainability by empirically investigating how being social sustainability oriented (or just adopting one or few social sustainability practices) may effect the operations of a company. The results we present in the paper can be useful for managers who are in charge of making decision related to social sustainability because they show the effects of adopting such practices in terms of changes in the operations but also in terms of performance.

### Appendix A. Items used for latent variables

#### Social Sustainability Practices

What is the status of these other Social Sustainability Practices in your Equestrian Centre? For each activity please indicate if it is:

1	2	3	4	5
Not being considered	Future consideration	Assessing suitability	Currently implementing	Successfully implemented

- a. INTERNAL SOCIAL ACTIVIES (SSP\_INT) [Cronbach’s alpha = 0.87; AVE = 0.66; CR = 0.88]:
  - Ensuring fair working conditions and remuneration of employees (y1)
  - Hiring former inmates or immigrants (y2)
  - Joining health and safety programs for employees (y3)
  - Ensuring gender and ethnic equality among employees (y4)
- b. SUPPLY CHAIN SOCIAL ACTIVITIES (SSP\_SC) [Cronbach’s alpha = 0.68; AVE = 0.60; CR = 0.80]:
  - Choosing suppliers and collaborating companies that are part of the Fair Trade (z1)
  - Choosing suppliers and collaborating companies that perform some social responsibility activities (z2)
  - Offering reduced rates for poor customers (z3)
  - Offering a free nursery for customers with young children (z4)
- c. SOCIETY AND EXTERNAL ORIENTED SOCIAL ACTIVITIES (SSP\_EXT) [Cronbach’s alpha = 0.71; AVE = 0.60; CR = 0.85]
  - Organizing social events (t1)
  - Joining anti-corruption programs (t2)
  - Proposing your own structure as socio-educational centre or voluntary service (t3)
  - Carrying out charitable and donation activities (t4)



**Motivation**

Please indicate your level of agreement with the following sentences using the scale:

1	2	3	4	5
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree

You have carried out Social Sustainability practices to:

- a. COMPETITIVE ADVANTAGE (MOT\_CA; MOT\_THR\_CA) [Cronbach’s alpha = 0.75; AVE = 0.50; CR = 0.78]; [Cronbach’s alpha = 0.94; AVE = 0.60; CR = 0.81]:
  - Because of the pressure coming from customers and/or suppliers and/or sponsors and/or Federation (d1; r1)
  - Because of the pressure from the Media and/or Community/Society (d2; r2)
  - To acquire new customers (d3; r3)
- a. EXTERNAL PRESSURE (MOT\_EXT; MOT\_THR\_EXT) [Cronbach’s alpha = 0.80; AVE = 0.70; CR = 0.82]; [Cronbach’s alpha = 0.92; AVE = 0.68; CR = 0.80]:
  - To achieve greater differentiation or expansion of offered services (o1; w1)
  - To get more prestige and visibility of the equestrian centre (o2; w2)
- b. SOCIAL SENSITIVITY (MOT\_SS; MOT\_THR\_SS):
  - To meet your sensibility to social issues (q; p)

**Performance**

Please indicate your level of agreement with the following sentences using the scale:

1	2	3	4	5
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree

- a. FINANCIAL PERFORMANCE (SSP\_FP; THR\_FP):
  - Increase in profits or other financial/economics performance (l; g)
- b. SOCIAL PERFORMANCE (SSP\_SP; THR\_SP):
  - Improvement of the psychophysical condition of your disabled clients (n; f)

**THR activity (THR\_CORE)**

- a. How much the THR activities are part of your core business (u):
  - Less than 25%
  - Between 25% and 50%
  - Between 50% and 75%
  - More than 75%

**Social sustainability orientation**

Please indicate your level of agreement with the following sentences using the scale:

1	2	3	4	5
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree

- a. INTERNAL SOCIAL ACTIVITIES (SSO\_INT):
  - THR activities made my centre more sensitive to implement internal social activities (e.g. ensuring fair working conditions and remuneration of employees, etc.) (a)
- b. SUPPLY CHAIN SOCIAL ACTIVITIES (SSO\_SC) [Cronbach’s alpha = 0.82; AVE = 0.72; CR = 0.84]:
  - THR activities made my centre more sensitive to select supplier which are more social sustainable (e.g. suppliers that are part of the Fair Trade, etc.) (e1)
  - THR activities made my centre more sensitive respect to needing customers (e.g. offering reduced rates for poor customers, offering a free nursery for customers with young children, etc.) (e2)
- c. SOCIETY AND EXTERNAL ORIENTED SOCIAL ACTIVITIES (SSO\_EXT)
  - THR activities made my centre more sensitive to implement external social activities (e.g. organizing social events, carrying out charitable and donation activities, etc.) (i)

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