

Suppliers' Non-Compliance with Sustainability Standards: A New Perspective Based on Discrete-Choice Experiments

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ABSTRACT

What are the factors that contribute to non-compliance with a supply chain partner's sustainability efforts? Based on institutional theory and social cognitive theory, a discrete-choice experiment was conducted with 128 U.S., 105 Brazilian and 109 Indian managers to test alternative causes of suppliers' non-compliance. Results of regression modeling provide preliminary evidence to support the idea that managers' cultural and institutional background influence the way they perceive compliance with the buyer firm's sustainability practices and that certain positions in the supply chain influence their likelihood to not comply with them.

Key-words: discrete-choice experiment; compliance; supplier codes of conduct; corporate social responsibility; sustainability

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1 Introduction

In a global supply chain, it can be challenging to monitor the practices of distant, sometimes remotely located suppliers. However, a firm's reputation can be tarnished by its use of suppliers that fail to follow acceptable standards. For example, it is estimated that 45.8 million people work in modern slavery (sweatshop) conditions worldwide (Walk Free Foundation, 2016). Not surprisingly, most live in countries that provide low-cost labor to produce goods for firms in developed economies. In India alone, an 18.4 million people work in modern slavery conditions. The failure to implement sustainable practices in the apparel industry is attributed to socially accepted practices, such as the "Sumangali Scheme", which exploits young women in spinning and textile firms in the Tamil Nadu region, which supplies many global brands. Even though the Sumangali Scheme violates India's labor laws and international employment standards, the exploited workers, their parents and relatives socially support it (Fair Labor Association & Solidaridad, 2012). The challenge is for researchers to investigate more deeply the reasons that lead a firm to fail to achieve compliance, by suppliers, with its sustainability standards.

The Sustainable Supply Chain Management (SSCM) literature is based on the underlying – and oftentimes omitted – assumption that a firm can enforce suppliers' compliance with its sustainability standards by coercion or cooperation (Gimenez & Tachizawa, 2012; Kumar & Rahman, 2015). Under the coercion paradigm, a firm enforces sustainability practices through its Supplier Code of Conduct (SCC), inspecting suppliers' facilities, selecting suppliers based on certifications (e.g., ISO 14001) and by penalizing for implementing non-compliant practices (e.g., Porteous et al., 2015). Contrarily, under the cooperation paradigm, a firm develops a trust-based, collaborative, long-term relationship with its suppliers, motivating them to comply with its sustainability practices because the

suppliers “care” about the relationship and perceive the benefits of maintaining it (e.g., Vachon & Klassen, 2008).

Nonetheless, both paradigms are limited, in several ways (see also Lund-Thomsen & Lindgreen, 2014). First, with few exceptions (e.g., Aßländer et al., 2016; Grimm et al., 2014; Wilhelm et al., 2016), studies based on these paradigms draw conclusions based on analysis of a buyer-supplier dyad (Carter & Easton, 2011; Grimm et al., 2014; Kim et al., 2016), which is a simplistic representation of an actual multi-tier global supply network (Mena et al., 2013). In addition, more severe violations tend to take place in lower, rather than first-tier, suppliers (Wilhelm et al., 2016), less visible to the buyer firm. Moreover, researchers tend to ignore the existence of multiple institutional environments (Wilhelm et al., 2016), which generate conflicting prescriptions and unbalanced external pressures to adopt sustainability practices. Conflicting prescriptions result from a firm’s sustainability standards, which may disregard its suppliers’ local context, cultural beliefs and social norms, although they conflict with its standards (Egels-Zandén, 2007; Lund-Thomsen & Lindgreen, 2014; Jiang, 2009a; Jiang, 2009b; Wilhelm et al., 2016). The latter, unbalanced external pressures, result from public opinion and other external stakeholders that do not differentiate a firm from its suppliers; thus, a firm is viewed as responsible for the implementation of sustainability standards in its entire supply chain (Grimm et al., 2014). However, a supplier located in a remote area of a developing country faces few external pressures to adopt sustainability practices, other than pressure exerted by firm. Finally, studies related to SSCM that focus on the firm level of analysis ignore the fact that decisions are made by managers who are likely to be unconsciously biased by personal factors (e.g., culture, values and emotions), and motivated by conflicting goals (Bendoly et al.; Carter & Easton, 2011; Croson et al., 2013). Empirical evidence considering the individual level of analysis (e.g. Kirchoff et al., 2016) shows how “reality bites” (Croson et al., 2013) when individual factors are not considered.

Due to these limitations we suggest that the SSCM literature is too optimistic about suppliers' compliance with sustainability practices by suppliers. Suppliers' willingness to implement such practices seems overstated, while the reasons for failing to implement them seem oversimplified, as mere "barriers" that can be overcome by coercion or collaboration (e.g., Kumar & Rahman, 2015). On the other hand, examples of human suffering caused by the lack of SSCM in supply chain are numerous, such as Zara suppliers' sweatshop practices in Brazil¹ and the fatal fire involving a group of garment suppliers in Bangladesh², among others.

This research addresses the following research question: "What causes suppliers' non-compliance with a firm's sustainability standards in global supply chains?". Based on institutional theory (Meyer & Rowan, 1977) and social cognitive theory (Bandura, 1986), our primary research objective is to test for institutional, organizational and individual causes of suppliers' non-compliant behavior with a firm's sustainability standards. Specifically, our intention is to analyze whether conflicting institutional elements, suppliers' position in a supply chain and managers' morality affect non-compliant behavior. Furthermore, since managers' behavior is expected to vary across national cultures, our secondary research objective is to compare these causal relationships across managers with different cultural and institutional backgrounds.

The next sections are organized as follows. The theory section bridges macro and micro concepts, drawing hypotheses from both institutional and social cognitive theories, in order to explain non-compliant behavior at the institutional, organizational and individual levels of analysis. The methodology section provides details about our methodological approach, which uses discrete-choice scenario experiments with repeated measures. The

¹The Guardian, 2011. "Zara Accused in Brazil Sweatshop Inquiry". Available in: <https://www.theguardian.com/world/2011/aug/18/zara-brazil-sweatshop-accusation>.

²New York Times, 2012. "Fatal Fire in Bangladesh Highlights the Dangers Facing Garment Workers". Available in: <http://www.nytimes.com/2012/11/26/world/asia/bangladesh-fire-kills-more-than-100-and-injures-many.html>.

results section presents the results of our hypothesis tests using regression analysis. In the discussion section, we compare expected and actual results, positioning how our empirical findings relate to the existent literature. We end with the conclusion section, which discusses limitations to the generalizability of our findings, opportunities for future research and contributions to literature and practice.

2 Theoretical foundations

The conceptual foundation for this research is developed at the institutional, organizational and individual levels, summarized in **Figure 1**.

----- Insert Figure 1 about here -----

2.1 Institutional level

2.1.1 Neo-institutionalism

Meyer and Rowan's seminal paper (1977) marked the beginning of neo-institutionalism, calling attention to the taken-for-granted legitimacy of "rational" formal structures of firms and their isomorphic compliance with those considered legitimate in a society. Organizational structures, they argued, are not only a result of rational imperatives and resource dependencies, but also a result of "rationalized myths", which legitimate what is considered to be a rational goal and specific means for pursuing it (Meyer & Rowan, 1977; Scott, 2008).

Because this view assumes that a firm can survive over time only if it complies with these rationalized myths (Meyer & Rowan, 1977), neo-institutionalism has been widely used to explain why firms pursue sustainability practices (Carter & Easton, 2011). In the past, a firm was expected only to deliver economic performance. Expectations, however, have shifted to include environmental and social pressures that motivate a firm to pursue a "triple bottom-line" result (Elkington, 1997). According to neo-institutionalism, a firm that disregards the natural environment and disrespects its employees and the society they are part

of should not be able to survive. As a result, many firms implement sustainability practices, both in their own operations and in their supply chain (Carter & Rogers, 2008; Carter & Easton, 2011).

2.1.2 Institutional complexity

However, this view fails to explain why some firms or their suppliers deliberately decide to not implement sustainability practices (e.g. Kirchoff et al., 2016). Although early in the development of neo-institutionalism, a firm was seen as the passive recipient of institutional pressure that would always conform with the rationalized myths of its institutional environment (DiMaggio & Powell, 1983), this conception has been criticized because it fails to explain reality in certain contexts (Oliver, 1991). If conformity is the only response to institutional pressures, firms facing the same institutional environment should become homogenous over time. Moreover, assuming all firms are able to conform to all external pressures implies that there are no conflicting external pressures. Neo-institutionalism developed, thus, to recognize such limitations (Oliver, 1991) and began to view a firm as an active agent interacting with its institutional environment. As a result, its responses to external pressure include not only isomorphism, but also compromise, avoidance, defiance, and manipulation of these institutional pressures.

This new concept of “institutional complexity” (Raaijmakers et al., 2015) provides a foundation for understanding the implementation of sustainable practices in a supply chain. Different firms within a supply chain face conflicting institutional pressures. When a firm interprets the rationalized myths of its institutional environment, it translates what is considered legitimate in its society to generate policies and standards it expects its suppliers to follow. Sustainability practices are no exception: SCCs, certificates, and even the definition of what is considered “sustainable” are products of firms’ institutional environment (Lund-Thomsen & Lindgreen, 2014; Wilhelm et al., 2016). However, because a firm and its

suppliers may not be embedded in the same institutional environment, the policies and standards that it develops can be in discordance with the suppliers' institutional environment, generating institutional complexity. In such a context, according to neo-institutionalism, suppliers' managers must decide whether to comply or not with the firm's prescriptions. In the absence of conflicting institutional elements, however, compliance with the firm's prescriptions should be facilitated. Thus, our first research hypothesis is:

H1: *Suppliers' non-compliance with a firm's sustainability standards is higher in the face of conflicting institutional elements in suppliers' institutional environments than in the absence of them.*

2.2 *Organizational level*

2.2.1 *Multiple institutional environments in supply chains*

Considering that some firms and their suppliers may be embedded in the same institutional environment, it is important to understand situations in which conflicting institutional elements are expected. Although early neo-institutionalism theorists assumed that a firm faces two different environments (technical and institutional) that each pressure it differently, this challenges the understanding that legitimated institutional structures also define and constitute the technical environment itself (Scott, 2008; Scott & Meyer, 1983). As a result, the institutional environment is described as constituted of regulative, normative and cultural-cognitive elements that are shared within a society. A particular institutional environment differs from another because of the differences their elements (Scott, 2001; 2008).

Regulative elements include rules, laws and organizationally-defined sanctions that allow legitimate firms to constrain and regularize behavior, enforcing compliance (Scott, 2001). In the case of sustainability, a firm defines the rules its suppliers must follow in order to continue doing business with it. Suppliers, on the other hand, are inclined to follow rules that they believe are legitimate, if they think they are being monitored, or if they fear

punishment (Porteous et al., 2015). Values and norms, on the other hand, constitute normative elements, which prescribe roles that social actors can assume and legitimate the manners of the people assuming these roles (Scott, 2001). For example, normative elements may prescribe that a firm is responsible for implementing sustainability standards throughout its supply chains. Its suppliers, however, experience no pressure to implement such practices in their own operations because the same practices may be not be legitimate in their institutional environments. The Sumangali Scheme is an example of a social accepted practice that, in fact, pressures suppliers to go against sustainability practices (Fair Labor Association & Solidaridad, 2012). Finally, shared conceptions of social reality constitute cultural-cognitive elements, which shape the way humans symbolize and internalize social reality (Scott, 2001). A firm and its suppliers may differ in terms of the types of behavior, social action and social obligation each takes for granted. While child labor is a practice that cannot be conceived of in some cultures, in others it is considered a way to train and socialize children so that they will have a wage in the future (Lund-Thomsen & Lindgreen, 2014).

Because institutional elements are usually similar within similar geographical regions, the structure of a supply chain determines whether a firm and its suppliers are in the same institutional environment. If both are located in the same region of the U.S., for example, non-compliance with the firm's sustainability practices is not expected to be explained by conflicting institutional elements. However, if the firm is located in the U.S. and its suppliers are located in India or Brazil, they are not in the same institutional environment and, therefore, suppliers' non-compliance with the firm's sustainability practices can be explained by conflicting institutional elements (e.g. Wilhelm et al., 2016).

2.2.2 Supply chain configurations

Our focus is supply chain configurations that are multi-tier, complex, fragmented, and geographically dispersed, which is typical of most global supply chains (Mena et al., 2013).

We restrict our analysis to firms and their suppliers that are located in different countries and embedded in different institutional environments with different institutional elements, in spite of being in the same supply chain. In this context, neo-institutionalism suggests that a firm will prefer to comply with pressures exerted by institutions, firms or other stakeholders that they depend on for resources or legitimacy, in the presence of different institutional pressures for compliance (Raaijmakers et al., 2015). In a multi-tier supply chain with multiple institutional environments, the extent to which suppliers are dependent on a firm's resources and legitimacy should affect their compliance with its sustainability standards. We operationalized dependency as the position held by a supplier in a supply chain. In Mena et al.'s (2013) view of a traditional multi-tier supply chain, flows of materials, money and information are linear from lower to upper tiers. Accordingly, a firm is not directly connected with its second-tier suppliers, which are less dependent on its resources and legitimacy and, therefore, less likely to comply with its prescriptions, than first-tier suppliers would be. Thus, our second research hypothesis is:

H2: *Suppliers' non-compliance with a firm's sustainability standards is higher in second-tier suppliers than in first-tier suppliers.*

2.3 *Individual level*

2.3.1 *Social cognitive theory*

Conflicting institutional elements and suppliers' position in the supply chain, nevertheless, may not be sufficient to explain suppliers' non-compliance with a firm's sustainability standards in a supply chain, since both the firm's and the suppliers' managers can be biased by internal factors that affect their decisions (Croson et al., 2013). Social cognitive theory provides a theoretical lens for analyzing how internal factors affect managers' non-compliant behavior. In contrast with other psychological theories (Allport, 1961; Cattell, 1966; Freud 1917; 1933; Skinner, 1953; 1969), it recognizes that personal

internal factors are in reciprocal interaction with environmental events and with people's behavior in "triadic reciprocal causation" (Bandura, 1986), which is represented in **Figure 2**.

----- Insert Figure 2 about here -----

In this triadic reciprocal causal relationship, managers' non-compliant behavior is explained by the bidirectional interaction of their personal factors (e.g. culture, values and emotions) and the environment in which they are embedded (e.g. their influence in their organization and their organization's position in a supply chain). A manager who is not concerned about sustainability (personal factor), for instance, may not be interested in, and may even act to undermine, the implementation of sustainability practices in his or her firm's supply chain. On the other hand, if a manager has little influence in the choice of suppliers or the firm is highly dependent on a specific supplier (environmental factor), the manager's willingness to implement sustainability practices may not be enough to cause suppliers' compliance. Thus, managers' behavior is restricted or supported by personal and environmental factors, and, at the same time, their behavior may alter both.

2.3.2 Moral conduct, moral self, moral centrality and moral identity

Since the goal of sustainability practices is to prevent harmful actions against society and the environment, moral conduct is a personal factor that can influence a manager's intention to comply. Moral conduct, according to social cognitive theory, is both the ability to avoid causing harm to others and the power to act compassionately and with a sense of social obligation (Bandura, 1999b). It is internalized as a result of triadic reciprocal causation. People's socialization sets the standard for their moral conduct because it is disseminated by legitimate institutionalized systems, such as families, the educational system and the mass media. Thus, individuals socialized in different cultures and institutional backgrounds are expected to internalize different models of moral conduct and standards of conduct (Bandura, 1991).

Often referred as the moral self, this internalized model of moral conduct contains two elements: the having side (the values a moral person has) and the doing side (how a moral person acts). Not all people, however, attribute the same value to their moral self and some may attribute different value to each side. Moral centrality is the extent to which a person considers his or her internal model of moral conduct to be important in actions. It affects individuals' decision-making and motivational states, their behavior and intended behavior, and the self-conscious emotions they experience. Moral centrality has been operationalized in a number of ways, although the most researchers attribute it to Aquino and Reed's (2002) concept of "moral identity" (Jennings et al., 2015), which is used in this research to represent managers' morality. We expect managers with high moral identity to be more likely to comply with a firm's sustainability standards than those with low moral identity. Thus, our third research hypothesis is:

H3: *Suppliers' non-compliance with a firm's sustainability standards is higher if managers have low moral identity, rather than high moral identity.*

3 Methodology

3.1 Discrete choice experiment

An experimental vignette methodology was used to test the hypotheses in a discrete choice experiment with a mixed manipulation design and a post-experimental questionnaire. A discrete choice experiment is a type of decomposition method developed by McFadden (1974) and others. It has been widely used in microeconomic analysis of choice behavior and marketing research (McFadden, 2000; Swait & Louviere, 1993). Respondents are presented to a set of alternatives, called the "choice set", and are asked to choose the alternative they consider to be the best (Louviere, 1988; Train, 2002). It captures respondents' implicit choices, which may be hidden when they are directly asked about them (Aguinis & Bradley, 2014), assesses real-time decision processes (Aguinis & Bradley, 2014)

and avoids respondents' (especially managers') rhetorical answers (Priem et al., 2011). Based on random utility theory, discrete choice experiments assume that the respondents' utility for each choice is unknown, but can be inferred from its observable portion and random error component (Louviere, 1984), as represented by Equation 1:

$$U_{ni} = V_{ni} + \varepsilon_{ni}, \quad (1)$$

where: U_{ni} = unknown utility a respondent n obtains from the choice of alternative i ,
 V_{ni} = observable component of the unknown utility a respondent n obtains from the choice alternative i , and
 ε_{ni} = random error component of the unknown utility a respondent n obtains from the choice of alternative i .

Because respondents maximize their utility in their choices, they will choose alternative i if the utility they obtain from it is higher than the utility they would obtain from the choice of any other alternative j , considering a finite set of alternatives $j = 1, \dots, J$. Expressing V_{ni} as a function of alternative i 's observable attributes and respondent n 's observable characteristics related to this alternative, discrete choice experiments allow decomposition of respondent n 's choice pattern into observable factors and their influence on the choice (Louviere, 1984; Train, 2002), as represented in Equation 2:

$$V_{nj} = \beta'x_{nj}, \forall j \quad (2)$$

where: x_{nj} = vector of observable attributes of alternative j and observable characteristics of respondent n
 β 's = unknown coefficients of such characteristics, statistically inferred by the researcher.

3.2 Sample

We collected data from U.S., Brazilian and Indian managers since one of the objectives was to compare suppliers' non-compliance across cultures. The U.S., Brazil and India have different institutional environments regarding such practices. While the U.S. is the least vulnerable to modern slavery, India is the most vulnerable, with the greatest number of

people working in such conditions. Among developing countries, Brazil is the least vulnerable to modern slavery (Walk Free Foundation, 2016).

The U.S. and Indian respondents participated online for convenience in data collection and to increase task realism, since they were able to answer the questionnaires in their “natural setting” instead of an artificial laboratory environment (Aguinis & Bradley, 2014). Amazon Mechanical-Turk (M-Turk), which is an eLancing platform that allows users to request tasks from other users in exchange for compensation, was used to offer \$1.00 per respondent for participating in this experiment. We controlled for IP addresses to prevent answers from outside the U.S. and India and to avoid duplicate respondents. In order to ensure reliability of the data, we included three attention checks and did not record data from respondents who failed any of them, allowed respondents to use a maximum of two hours to complete the task, and eliminated data from respondents who spent less than five seconds reading any module. Further, we only included questions for filtering M-turkers (e.g.: asking whether respondents were managers) after they had completed the questionnaires and compensated them no matter what their response was to the filtering questions, in order to prevent lying in order to receive compensation.

Data collection was done differently in Brazil because M-Turk and other eLancing platforms are barely used there, perhaps because the native language is Portuguese. We distributed questionnaires both by email and on paper. Data was collected on four college campuses that offer part-time graduate business courses for working managers. They were invited to participate in the experiment during class time, as well as outside the entrance to these campuses. Participation was voluntary and, in most cases, respondents were given a small compensation in exchange for their answers.

Between October and November 2016, we collected data from 978 respondents, comprised of 402 Americans, 125 Brazilians and 451 Indians. However, most of those were

not managers and were, thus, not considered in the analysis. Removing non-manager respondents and unreliable answers, our final sample contained a total of 342 valid responses, being 128 Americans, 105 Brazilians and 109 Indians.

3.3 *Questionnaire*

The questionnaire contained a cover page, a small task before the main experiment to increase respondents' involvement, a common module and three manipulation modules with a written stimulus, containing a first person vignette in the form of a dialogue between the respondents' character and his or her boss, four choice sets after each manipulation module and a post-experimental questionnaire (see Appendix I). Questionnaires were self-administered in a single session (Aiman-Smith et al., 2002).

3.3.1 *Common module*

Respondents were asked to imagine themselves as a purchasing manager working for a firm in the apparel industry. Their boss tells them their firm is facing a tough time and is intending to reduce the cost of the next clothing collection to be launched by 20%. The respondents' fictional character knows that, if s/he does not achieve such goal, s/he will not receive a desired promotion. Respondents are also told they had started a bidding process to choose a foreign supplier for this new collection that their firm was launching and that their task is to choose one supplier among each choice set or "None".

The creation of supplier profiles with different attributes was intended to bring realism to the task, generating "natural noise" in the decision-making process (Aguinis & Bradley, 2014; Woehr & Lance, 1991). The supplier profiles contained different attributes related to cost, quality and delivery standards based on APICS (2011) guidelines for supplier selection. In addition, payment terms were added to supplier attributes, based on feedback during pilot testing. Each attribute was operationalized as low and high. Thus, there were $2^4 = 16$ combinations of the four supplier attributes. However, instead of using a full

orthogonal factorial design, we reduced the total number of supplier profiles from 16 to 8, using a fractional orthogonal factorial design. The respondents' choices were blocked in four different choice sets, containing two suppliers each. Because the use of fractional design and blocking can generate confounding effects, estimation of each attributes' importance was limited to main effects. However, this was sufficient to test our hypotheses.

3.3.2 *Manipulations*

There were two levels of each manipulation: (1) position of the supplier in the supply chain (first- vs. second-tier supplier), and (2) conflict between institutional elements (existence or absence of it). Respondents were presented with one of the two levels of the position (between-subjects) manipulation and to both levels of the conflict (within-subjects) manipulation. After each manipulation, respondents answered four blocks of choice sets, for a total of $3 * 4 = 12$ decisions. The repeated measures after the level of conflict manipulation were compared. Respondents' choices after the position manipulation were used as a practice trial, in order to avoid start-up effects, and were not considered in the analysis. Further, the setting was counterbalanced (Levin, 1998). Eight different versions of this experiment were created, combining one levels of position manipulation, one of the two different orders of the levels of conflict manipulation (AB or BA) and one of the two different orders of suppliers' attributes (XY or YX). The orders of choice sets and suppliers were randomized. **Figure 3** presents how manipulations were presented to respondents.

----- Insert Figure 3 about here -----

In one level of the position manipulation, respondents were told they had asked suppliers not to outsource production because, as their firm was responsible for any problem suppliers had in their operations, they wanted to be able to easily inspect production facilities (1st tier supplier). In the other level, they were told they had asked suppliers to outsource production to smaller suppliers, which they knew were more difficult to inspect, yet they

believed would prevent their firm from being responsible for its suppliers' outsourcing issues (2nd tier supplier).

Conflicting institutional elements manipulation levels were based on practices of modern slavery similar to the Sumangali Scheme (Fair Labor Association & Solidaridad, 2012) in the vignettes. Respondents were not explicitly told that a supplier's practices were related to modern slavery, in order to avoid social desirability bias. In one level of the conflict manipulation, respondents were presented with suppliers that used some Sumangali Scheme practices, yet their institutional environment did not support them. In the other level of conflict manipulation, the supplier used Sumangali Scheme practices, but their institutional environment supported such practices. In both levels, the suppliers' practices were counter to the firm's sustainability practices represented by its Supplier Code of Conduct. Thus, in one level, there was no conflict between suppliers' institutional environment and the respondent's firm code of conduct, while in the other level, this conflict existed. The practices described in each level were different, in order to incentivize respondents to carefully read each of them.

Based on feedback received during the pilot study recommending specification of the location where the suppliers were, we named the case of absence of conflict "Thailand" and the case of existence of conflict "Bangladesh". Those names were selected without any intention to reflect the reality of institutional environments in Bangladesh and Thailand. The names and the descriptions of each institutional environment were strictly fictional, but added a limitation to this research, since respondents might have prior knowledge about these countries; however, without them respondents were not able to differentiate between the scenarios and the task seemed unrealistic to them.

3.3.3 Pilot testing

We asked seven purchasing managers, with significant work experience with supply chains and operations, to analyze the research instrument and give us feedback about it. Their

feedback caused multiple changes to our original design, in order to be more realistic, increase respondents' involvement with the task and reduce respondents' fatigue and boredom. The questionnaire was pilot tested several times using M-Turk (U.S. and India) and undergrad students (Brazil) and, following each iteration, we fine-tuned the research instrument, then tested it again. During the pilot test of the final design described here, we received positive feedback from many respondents, causing us to commence main experiment data collection. **Table 1** lists the main changes made as a result of pilot testing.

----- Insert Table 1 about here -----

As part of pilot testing, we checked whether respondents understood the manipulations made, using manipulation checks. The manipulation check means were compared using independent (position manipulation) and dependent (conflict manipulation) t-tests. On average, all samples could differentiate between the manipulations, except for the Brazil sample for the third item for position manipulation. This may be due to the use of undergraduate students for pilot test in Brazil. They may have been more honest in their answers than Brazil's main experiment sample (managers), who might have intended to appear more politically correct on this item (Priem et al., 2011). As this was a problem in just one item out of nine manipulation checks, we assumed it was not a concern and kept the Brazil data without any exclusion. A summary of each sample's performance on the manipulation checks is presented in Tables 2 and 3.

----- Insert Table 2 and 3 about here -----

3.4 *Moral identity and social desirability scales*

This research assessed respondents' morality identity using Aquino and Reed's (2002) moral identity scale. Its items were averaged, similar to other studies (e.g. Caldwell & Moberg, 2007; Brebels et al., 2011). Because of the ethical dilemma presented, we included a control variable to account for social desirability bias, using the original version of the

Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). The post-experimental section of the questionnaire included these scales, as well as general questions about the respondent's demographics.

3.5 Analysis

The β 's for a discrete choice experiment can be estimated using different models, depending on the assumptions that are made about the distribution of ε_{ni} . We used a conditional logit model to solve for this assumption, making it possible to derive a closed-form expression to represent the probability of respondent n choosing alternative i over j , $\forall i \neq j$ (Train, 2002). Equation 3 presents this closed-form expression:

$$P_{ni} = \frac{\exp(\beta^*/\delta)x_{ni}}{\sum_j \exp(\beta^*/\delta)x_{nj}} \quad (3)$$

where: P_{ni} = probability of respondent n choosing alternative i over j
 δ = scale parameter for each coefficient, to reflect the unobserved portion of utility

This closed-form expression makes logit models easier to estimate and interpret (Train, 2002). It also implies they must have a base alternative to refer to. We included "None" as the base alternative. Thus, our results can be understood as the probability of selecting a supplier in the presence of any valued attributes, rather than selecting the "None" alternative. Since all suppliers have violated the focal firm's Supplier Code of Conduct, deciding to choose a supplier indicates that managers supported the suppliers' violations. As a result, the higher the probability of choosing a supplier instead of choosing none is, the higher the probability of violating the firm's sustainability practices.

Logit modeling is restricted by its assumption that errors are independently distributed with normalized variance, which means that the error component of utility for alternative i is not related to the error component of utility for another alternative j , $\forall i \neq j$ (Train, 2002). This limits the application of logit models to situations where the error terms are not dependent. It is possible to indirectly test for this property, which we did by testing whether

or not our model held the “independence of irrelevant alternatives” (IIA) property using the Hausman test (Hausman & McFadden, 1984). The IIA property of logit models is similar to the assumption of independent-error terms in least squares regression (McFadden et al., 1977) and, therefore, is a required condition for the application of conditional logit models.

Another limitation derived from the assumption that logit errors are independently distributed with normalized variance is the confounding effect of the coefficients β^* with the scale parameter δ (Allison, 1999; Train, 2002, p. 49). This implies that, if the random error components across groups are not equal, coefficient estimation can be biased and comparison across groups can indicate spurious differences where there are no differences in reality (Allison, 1999). Although potential confounding has been extensively recognized in the literature (Allison, 1999; Buis, 2016; Karlson et al., 2012; Mood, 2009; Swait & Louviere, 1993; Williams, 2009), there is no consensus on how to deal with it. In order to avoid biasing our estimated coefficients, we created a separate model for each of the countries, which were expected to have different residual variation. The comparison across countries was, thus, limited to which variables were or were not statistically significant in each country’s sample. The size of each country’s coefficients was not compared, in order to avoid spurious conclusions resulting from differences in scale parameters, rather than true differences in causal relationships. On the other hand, different managers within a country were not expected to have different residual variation because of their random assignment to each level of position manipulation.

Conditional logit models also imply that individual characteristics cannot enter the model, unless they are different over alternatives (Train, 2002). One way to account for those individual characteristics is to interact them with the attributes presented in each alternative. Individual characteristics, such as moral identity and the manipulations, interacted with the price attribute, which represents the respondents’ goal of reducing costs. Social desirability

was included in all interactions with moral identity because, if respondents have high moral identity, their responses should be honest, yet, if they have low moral identity, they could have biased their answers in order to present a positive image of themselves (Aquino & Reed, 2002). In order to avoid multicollinearity due to the inclusion of such interactions, both moral identity and social desirability were mean-centered. VIFs were calculated and were all lower than 1.483.

Dummy variables were created for suppliers' attributes and manipulations. Rather than using the conventional dummy notation (0, 1) for the manipulation dummies, we identified them as (-1, 1), in order to avoid confounding them with the value of the "None" dummy. Thus, suppliers' attributes dummies were: low = -1, "None" = 0 and high = 1. The manipulation dummies for position and conflict were 1st tier = -1, 2nd tier = 1, Conflict = -1 and Absence = 1, respectively.

3.6 *Measurement equivalence*

Comparing responses from different cultures could potentially cause measurement equivalence problems. Semantic equivalence assumes that the words and structure used in the research instruments have the same meaning in different cultures. Conceptual equivalence assumes that a concept, independent of the words used to explain it, exists in different cultures. Finally, normative equivalence assumes that researchers should adapt to different societal practices in different cultures, in order to guarantee equivalent answers (Behling & Law, 2000).

3.6.1 *Semantic equivalence*

Semantic equivalence is guaranteed for the Indian sample, since the source language for our instruments was English. However, a few words using American spelling were adapted (e.g., "organization" adapted to "organisation") to make it more natural for Indian respondents. For the Brazilian sample, one of the authors, who is fluent in English and a

native Portuguese speaker, prepared a Portuguese version of the research instruments. A native English speaker was hired to back-translate the Portuguese version to English, and both versions were compared and were found to be equivalent. It was not necessary to repeat this process, yet after the pilot test with Brazil sample we made two other small adjustments to Portuguese version: (1) the translation of the word “outsource” was changed to its literal description, to avoid ambiguous meanings in Portuguese; and (2) additional information about choice set instructions were added to the paper version in order to guarantee common understanding between paper and online versions.

3.6.2 Conceptual equivalence

Conceptual equivalence of the Portuguese and English versions was achieved using pre-existing validated translations for the moral identity (Rezende, 2015) and social desirability scales (Ribas Jr. et al., 2004). In addition, we conducted a Confirmatory Factor Analysis (CFA) of the moral identity scale using experimental data from all countries (Behling & Law, 2000). After removing two items from the original scales (moral internalization item 3 and moral symbolization item 4) because they had a low standardized regression weight (< 0.30) or had high cross-interactions with items of the other factor, the resulting CFA had satisfactory model fit indexes ($\chi^2 = 156.835, CMIN/df = 2.064, GFI = 0.945, TLI = 0.942, CFI = 0.945, RMSEA = .040$) indicating no conceptual equivalence issues. A test for model unidimensionality was also performed, and the model fit was better when considering the items as multidimensional, as described in the previous literature (Aquino & Reed, 2002).

3.6.3 Normative equivalence

Normative equivalence issues are a potential concern because they are subtle, complex to identify, and difficult to deal with. Although some of these issues might have affected the results, we tried to minimize them by applying existing scales and existing

translations that had been tested in previous research, guaranteeing anonymity to respondents, and having native Brazilians (two of the researchers) analyze the translated research instrument (Behling & Law, 2000).

4 Results

4.1 Hypotheses test

Table 4 presents the results of the conditional logit analysis by country. The McFadden's R^2 for all models was between 0.25 and 0.40, indicating excellent fit (McFadden, 1979, p. 307). Each model was tested for the IIA property using the Hausman test, failing to reject the null hypothesis in all cases ($\chi^2_{U.S.} = 10.85$ $p_{U.S.} = .547$, $\chi^2_{Brazil} = 10.86$ $p_{Brazil} = .541$ and $\chi^2_{India} = 11.62$ $p_{India} = .474$), which confirms that IIA holds for all countries, as well as the adequateness of conditional logit models for analyzing our data.

----- Insert Table 4 about here -----

In order to test the hypotheses, the significant coefficients and their signs were interpreted. The higher a coefficient is, the higher the probability of selecting a supplier in the presence of that factor, compared to the probability of selecting "None." H1 stated that suppliers' non-compliance with the focal firm's sustainability standards is higher in the face of conflicting institutional elements than in its absence. Conflict manipulation was only significant for the U.S. sample in its interaction with price ($\beta = -.098$ $p = .077$). The coefficient for the U.S. sample for the interaction of price and conflict was $\beta = (-.098) * Price * Conflict$, which resulted in $\beta_{Absence} = -.098$ and $\beta_{Existence} = .098$. In other words, for the U.S. sample, the probability of selecting a supplier instead "None" is higher when there is a conflict between institutional elements than there is not. As a result, H1 held for the U.S. sample, but did not hold for the Brazil and India samples. Thus, H1 was partially confirmed.

H2 stated that suppliers' non-compliance with the focal firm's sustainability standards would be higher for second-tier suppliers rather than for first-tier suppliers. The position manipulation interactions were significant in the U.S. and Brazil samples, but not in the India sample. For the U.S. sample, the interaction between price, moral identity and social desirability was significant ($\beta = -.026$ $p = .091$). Although the coefficient size may seem small, it is important to recall that, because of its interaction with social desirability, which had a standard deviation of 6.093 in the U.S. sample, its actual value is higher and similar to other coefficient sizes. In order to interpret the coefficient sign of this interaction, we controlled for a low level of social desirability bias by considering social desirability score to be $-1SD$ from mean, analogous to the treatment given to low levels of moral identity in the moral self literature (e.g., Aquino et al., 2009; Skarlicki & Van Jaarsveld, 2008; Winterich et al., 2013). The coefficient for the U.S. sample in the interaction of price, moral identity, position and social desirability ($-1SD = -6.093$) was $\beta = -.026 * Price * Moral Id * Position * SDS_Score$, which resulted in $\beta_{1st} = -.158 * Moral Id$ and $\beta_{2nd} = .158 * Moral Id$. For the Brazil sample, position was significant in its interaction with price ($\beta = -.108$ $p = .051$) and with price and moral identity ($\beta = -.463$ $p = .000$). Thus, the coefficient for the Brazil sample for the interaction of price and position was $\beta = -.108 * Price * Position$, which resulted in $\beta_{1st} = .108$ and $\beta_{2nd} = -.108$, and the coefficient for the Brazil sample for the interaction of price, moral identity and position was $\beta = -.463 * Price * Moral Id * Position$, which resulted in $\beta_{1st} = .463 * Moral Id$ and $\beta_{2nd} = -.463 * Moral Id$. Thus, H2 held only for the U.S. sample, because it did not hold for significant interactions with the position manipulation for the Brazil sample and was not significant for the India sample. H2 was partially confirmed.

H3 stated that suppliers' non-compliance with the focal firm's sustainability standards would be higher if managers had low, rather than high, moral identity. Moral identity

interactions were significant for the U.S. and Brazil samples, but not for the India sample. For the U.S. sample, moral identity was significant in its interaction with price ($\beta = -.272$ $p = .003$) and its interaction with price, position and social desirability ($\beta = -.026$ $p = 0.091$). We controlled for the low level of social desirability bias in the U.S. sample ($-1SD$ from mean). Additionally, we applied the same treatment given to moral identity interactions in the moral self literature (e.g., Aquino et al., 2009; Skarlicki & Van Jaarsveld, 2008; Winterich et al., 2013), analyzing them at two levels of moral identity: low = $-1SD$ from the mean and high = $+1SD$ from the mean. The coefficients for the U.S. sample for the interaction of price and moral identity was $\beta = -.272 * Price * Moral Id$, which resulted in $\beta_{LowMI} = .190$ and $\beta_{HighMI} = -.190$ and the coefficients for the U.S. sample for the interaction of price, moral identity ($1SD = .70$), position and social desirability was $\beta = -.026 * Price * Moral Id * Position * SDS_Score$, which, for the 1st tier, resulted in $\beta_{LowMI} = .111$ and $\beta_{HighMI} = -.111$, and, for the 2nd tier resulted in $\beta_{LowMI} = -.111$ and $\beta_{HighMI} = .111$. For the Brazil sample, the interaction between price, moral identity and position was significant ($\beta = -.463$ $p = .000$). Consequently, the coefficient for the Brazil sample for the interaction of price, moral identity and position was $\beta = -.463 * Price * Moral Id * Position$, which, for the 1st tier of position manipulation, resulted in $\beta_{LowMI} = -.258$ and $\beta_{HighMI} = .258$, and, for the 2nd tier, resulted in $\beta_{LowMI} = -.258$ and $\beta_{HighMI} = .258$. Thus, because H3 held only for some significant interactions of moral identity in the U.S. and Brazil samples and did not hold for the India sample, H3 was partially confirmed.

4.2 Valued attributes

The respondents' goal was represented by the low price attribute. Therefore, we expected price to be the most valued attribute in all samples, if managers chose a supplier rather than the "None" alternative. Other attributes should be valued as well, since we had included them to represent "natural noise", but managers had no reason to prioritize them

over price. Empirical findings confirmed this expectation. The price attribute was significant, and the most valued attribute in all country samples. In addition, the quality attribute was also significant in all samples. The Brazil sample was the only one with significant values of lead time and payment terms. Although understanding the reasons why different cultures value different attributes is beyond the scope of this research, such results support the conclusion that quality, lead time and payment terms worked as “natural noise” in respondents’ choices. As a result, it is possible to assume that respondents felt the task to be similar to a lifelike situation (Aguinis & Bradley, 2014) and, consequently, their choices represented their actual behavior.

4.3 *Choice behavior*

According to H1 and H2, the main effects indicate the respondents’ probability of selecting a supplier to be lower in the “Absence” level of conflict and in the “1st tier” level of position. This effect should be the same, despite differences in respondents’ moral identity. Similarly, according to H3, respondents’ probability of selecting a supplier should be lower for those with higher moral identity, which should be the same despite the levels of conflict and position. **Figure 4a** represents expected respondents’ choice behavior in the presence of any valued attribute. Axis Y indicates the probability of selecting a supplier instead of “None,” and axis X indicates ascending values of moral identity. Comparing the expected results with each sample’s actual choice behavior clarifies how they did not follow the expected results. Actual choice behavior charts were built considering significant variables in Model 4 for each country. Choice behavior by country, in the presence of low price, is presented in **Figures 4b-4d**.

----- Insert Figure 4 about here -----

Analyzing U.S. sample choice behavior in **Figure 4b**, the conflict effect was as expected for individuals within the same position level. This latter effect was moderated by

respondents' moral identity. Respondents with "low" moral identity were more likely to select suppliers in the "1st tier" level, while respondents with "high" moral identity were more likely to select suppliers in the "2nd tier" level. Finally, the moral identity effect was different for each position level. The probability of selecting a supplier in the "2nd tier" was almost equal, despite respondents' moral identity. Contrarily, in the "1st tier", the moral identity effect decreased the probability of selecting a supplier.

Analyzing sample choice behavior in the Brazil sample's **Figure 4c**, the conflict effect was not significant, despite the differences in respondents' moral identity levels. The position effect, however, was moderated by respondents' moral identity. In contrast to the U.S. results, respondents with "low" moral identity were more likely to select suppliers in "2nd tier", while respondents with "high" moral identity were more likely to select suppliers in "1st tier". Further, the moral identity effect decreased the probability of selecting a supplier in the "2nd tier" as expected, but increased it in the "1st tier".

Finally, analyzing the India sample choice behavior in **Figure 4d**, the probability of choosing a supplier, instead of "None", was equal in spite of the presence of conflicting institutional elements, the position of the suppliers in the supply chain and their level of moral identity.

5 Discussion

In general terms, the results indicate that: (1) respondents socialized in different cultures and institutional contexts had different types of non-compliant behavior, and (2) respondents with a "high" moral identity could violate their self-regulatory mechanisms under certain positions in the supply chain that presented similar – or in some cases higher – probabilities of selecting a supplier than respondents with low moral identity, such as the U.S. sample assessing suppliers in 2nd tier, the Brazil sample assessing suppliers in the 1st tier and, in the India sample, assessing suppliers in both positions.

5.1 *Cultural and institutional differences in choice behavior*

The conclusion regarding respondents socialized in different cultural and institutional contexts presents different choice behaviors that can be explained, using social cognitive theory, by the fact that people construct their internal models, which regulate their behavior, based on their bidirectional interaction with their environment – which is, at least partially, constituted by their national culture – based on how they represent the environment in symbols, which is translated into courses of action and motivational factors for pursuing these courses of action (Bandura, 1999a). Not surprisingly, culture is seen as an antecedent to moral-self centrality and, consequently, to moral identity (Jennings et al., 2015).

Another plausible explanation lies in the fact that only the U.S. sample significantly differentiated choice behavior in the presence of conflicting institutional elements. Because suppliers' violations of the firm's sustainability standards were related to the practices of modern slavery and because people interact with their immediate environment in developing their expectations about themselves, it may be reasonable to assume that people socialized under different institutional environments will have different choice behavior. As far as modern slavery practices are concerned, the U.S. institutional environment is stricter than Brazil's and India's institutional environments (Walk Free Foundation, 2016), which each contain several vulnerabilities that can make modern slavery practices socially acceptable, including weaker law enforcement, an overworked judicial system, corruption, higher social inequality, weaker government responses and strong informal economy.

The empirical results indicate that managers socialized under stricter institutional environments are more aware of suppliers' violations to the firm's sustainability standards than managers socialized under more permissive institutional environments.

5.2 *Moral disengagement mechanisms*

In different positions in the supply chain, we found that respondents with high moral identity violate their self-regulatory mechanism, with a similar – or in some cases higher – probability of selecting a supplier than respondents with low moral identity. According to social cognitive theory, people are expected to refrain from pursuing courses of action they anticipate will be self-censuring. People with high moral identity will self-regulate their actions to be in line with their expected self-efficacy of being a moral person (Bandura, 1999a). Why, then, wasn't this found in our empirical evidence? This may be the most intriguing finding. Although our theoretical proposition assumes managers to be consistent with their morality under any circumstances, the empirical evidence for all samples suggests the opposite.

Social cognitive theory suggests that, once self-regulatory mechanisms are in place, they tend to be stable and moral agency is regulated, inhibiting people from acting inhumanely and empowering them to act humanely (Bandura, 1999a; 1999b). However, these self-regulatory mechanisms are neither fixed nor a constant “superego” overseeing one's conduct. Rather, they operate only when they are activated, and social cognitive theory proposes different psychosocial maneuvers that can selectively deactivate those self-regulatory mechanisms related to moral conduct. “Moral disengagement”, thus, is achieved by either “sanctifying” the reprehensible conduct, distorting its detrimental effects or disqualifying the victim of the mistreatment. These actions can be effective alone or combined. In some situations, a single action is sufficient for disengaging moral conduct, whereas in other situations, a combination of actions produces the same effect (Bandura, 1986; 1991).

5.2.1 *Moral justification and palliative comparison*

Moral justification and palliative comparison (or “advantageous comparison”) transform detrimental conduct into personally and socially accepted practices (Bandura, 1999a). They do not rely on altering an individual’s personality structures or moral standards. Rather, moral justification finds endorsements for reprehensible behavior from within an individual’s current moral standards. Palliative comparison is based on contrasting the reprehensible behavior against an even worse criterion. After a behavior has been endorsed, people can then act inhumanely under a moral imperative, creating a self-conception of their actions supported by moral reasons. They do not see themselves “killing people”, for example, but rather they see themselves as “heroes” based on their morals (Bandura, 1999b).

In our vignette, there are some cues that might have activated moral justification or palliative comparison mechanisms. The boss tells respondents that the firm is currently facing tough times and must reduce costs. Not reducing it may put their jobs at risk or even affect the firm’s future (moral justification). Selecting suppliers in developing countries, where social inequalities are huge, may promote overall social benefits (moral justification). Such poor, unqualified workers may have no other job opportunities, if the firm decides not to supply from them (palliative comparison). As a result, respondents are no longer “selecting non-compliant suppliers”. Rather they are concerned about the overall economic and social benefit from keeping their firm running. Similar situations may happen in real-life supply chains.

5.2.2 *Euphemistic labeling*

Euphemistic labeling is another way of disguising reprehensible conduct as personally and socially acceptable. It is achieved by euphemizing the symbolic representation of reprehensible conduct by giving it a smoothed symbol in people’s thoughts. People can then engage in reprehensible conduct, depending on what they call it (Bandura, 1999b; 2007).

In the case of our vignette, we did not explicitly indicate that suppliers used modern slavery practices, in order to avoid social desirability bias. However, this might have worked as euphemistic labeling. It is easier to select “a supplier not in compliance with your firm’s SCC” than a “supplier using modern slavery practices”. Similar euphemistic labeling may happen in real-life supply chains. Instead of endorsing modern slavery practices or inhumane work conditions in their supply chains, managers view themselves as pursuing lower costs, or they see cost increase as a barrier to implementing sustainable practices.

5.2.3 Displacement and diffusion of responsibility

Displacement and diffusion of responsibility allow people to not see themselves as the actual agent of their behavior. Displacement of responsibility addresses the responsibility for reprehensible conduct to a legitimate authority. Diffusion of responsibility blurs the responsibility for reprehensible conduct by splitting it between several agents. Both mechanisms act to sanctify reprehensible behavior and, at the same time, allow people to ignore the consequences of their conduct. When responsibility for reprehensible conduct is displaced to authorities, such authorities can implicitly authorize it by keeping obvious questions unasked to avoid revealing to themselves that they are authorizing reprehensible conduct (Bandura, 1999b).

In our vignette, who was responsible for selecting non-compliant suppliers: the respondent, the respondents’ boss, the 1st tier supplier or the smaller suppliers hired by focal firm’s 1st tier supplier, in order to reduce costs? In a real-life supply chain, responsibility may be displaced and diffused to justify inhumane behavior. Suppliers’ managers may blame the firm for exerting cost reduction pressures, while the firm’s managers may displace responsibility to the suppliers’ managers who did not comply with their SCC or other certificates. In addition, the firm’s managers may avoid asking obvious questions in order to avoid the perception that they are authorizing reprehensible conduct. When a firm sells, for

instance, a football stitched in Pakistan at the price of US\$100 in North America, its managers may avoid questioning what their Pakistani suppliers did in order to deliver the same football to their firm at a cost of around US\$5 (Lund-Thomsen & Lindgreen, 2014). Finally, the firm's organizational structure may favor diffusion of responsibility, keeping the purchasing and corporate social responsibility departments apart, diffusing responsibility for suppliers' non-compliance with SCCs across both departments (Lund-Thomsen & Lindgreen, 2014).

5.2.4 Minimizing, ignoring or misconstruing the consequences

Minimizing, ignoring and misconstruing the consequences disengages moral conduct by keeping people distant from the suffering their conduct causes. The farther they are from the consequences of their actions, the more they will be inclined to minimize or ignore such consequences. Besides, when consciously pursuing harmful conduct because of personal self-interest, people tend to ignore or minimize its consequences and keep themselves as far as they can from the results of their conduct (Bandura, 1999b).

In our vignette, respondents were not directly informed of any harm their choices would generate, although they could have inferred it. As a result, they might have completely ignored the consequences of selecting a non-compliant supplier. Minimizing or ignoring the consequences may explain, for instance, why the U.S. sample preferred or were indifferent to suppliers whose conduct had consequences that took place far from their firm (in 2nd rather than the 1st tier). Similar effects may happen in real-life supply chains. Pursuing compliance with sustainability practices only in first-tier suppliers and avoiding increasing the visibility of other supply chain tiers may be an effective manner of preventing managers from acknowledging the inhumane consequences of their conduct.

5.2.5 *Dehumanization and attribution of blame*

Dehumanization and attribution of blame mechanisms attempt to disqualify the victim of the maltreatment. Once the victims are disqualified or blamed, reprehensible conduct can be justified and excused. Dehumanization distorts victims' human qualities, transforming them into subhuman objects. Attribution of blame allocates responsibility for the mistreatment to the victims or to the circumstances (Bandura, 1999b). Such mechanisms are less clear than the others in our vignette and in real-life supply chains contexts; thus, we do not discuss them further.

6 Conclusions

6.1 *Limitations*

Experimental designs offer an excellent approach for understanding causal relationships, providing respondents with controlled manipulations that enhance internal validity, by minimizing alternative explanations for the results. On the other hand, they are limited in terms of external validity and, although we took several steps to minimize these limitations, it is not possible to address them completely. First, our sample may not represent the full range of American, Brazilian and Indian managers, considering the usage of M-Turk in the U.S. and India, which restricts data collection to "large samples of working individuals at relatively low cost" (Aguinis & Bradley, 2014), and data collection in Brazil only accounted for managers who were enrolled in graduate business courses in São Paulo state. Moreover, although the vignette is not unrealistic in a business context, all its nuances – the goal and the compensation to achieve it, the presence of a boss, the suppliers' location, the "Sumangali Scheme" practices, and so on – limit the generalizability of our findings. Finally, even though we randomly assigned subjects to treatments and controlled for differences between respondents and omitted-variable bias, demand effects could still have existed, limiting generalization of our findings to the individual level. The repetition of similar

experiments with different samples, case studies and survey designs are ways to address such limitations.

6.2 *Final considerations*

In our intention to understand three causes of suppliers' non-compliance with a firm's sustainability standards in a supply chain, we found support for two unexpected results, which are not in contradiction with the theories they were based on. First, different cultural and institutional backgrounds may affect the way managers perceive suppliers' non-compliance with a focal firm's sustainability standards, especially for those whose socialization processes occurred in more permissive institutional environments. Second, despite managers' morality or culture, certain positions in the supply chain allow them to violate their self-regulatory mechanisms and act against focal firm's sustainability policies.

The exploratory nature of our findings provides an invitation for future research to explore new and important theoretical concepts, in order to enhance our comprehension of non-compliant behavior in supply chains. Exploring how socialization, under different cultural and institutional contexts, influences suppliers' non-compliance with sustainability practices may contribute to approaching such practices more effectively in global supply chains. Testing moral disengagement mechanisms in a supply chain context may be enlightening in the creation of supply chain configurations that prevent managers from disengaging their morality. We also believe that greater application of social cognitive theory and discrete choice experiments to supply chain contexts can bring fruitful theoretical and methodological advancement to the understanding of SSCM dynamics.

This research contributes to the SSCM literature, social cognitive theory and practice. It brings new insights to the SSCM literature by applying different theoretical approaches and discrete choice experimental methodology, in order to take a step forward to overcome the limitations of the coercion and collaboration paradigms for implementation of sustainability

practices in a supply chain. Second, despite the wide application of moral disengagement concepts (e.g.: Bandura, 1999; 2004; 2007; McAlister et al., 2006; Osofsky et al., 2005; White et al., 2009), this research extends social cognitive theory to application in supply chains. Finally, it contributes to practice by shedding light on the importance of national culture, institutional environments and position in a supply chain to engage managers' compliance with sustainability practices in supply chains, which should help government, NGOs and corporate actors in organizing and managing sustainable supply chains that can enhance moral engagement and avoid inhumane behavior.

7 Appendix I – Research instrument

Common Module

Now, please imagine yourself in the following situation:

You've been working as a procurement manager for Premium Look for some time now. Premium Look is a global clothing brand, which is known worldwide.

"I have some bad news for you... We are facing tough times", your boss said during your last meeting. As your department is responsible for bidding and selecting garment component suppliers, this year's winter collection must cost around 20% less than the current collection.

"Anyway, stay positive, my friend... I know you can do it", your boss added. The conversation ended.

You know that reducing 20% of the current cost seems impossible, and you are worried. Your dream to get a promotion soon will probably be frustrated if you do not achieve this target. But you don't like the idea of giving up on your dreams...

Few days after, you started a bidding process with different foreign suppliers. You've also visited their operations and talked to some of their clients to better understand opportunities to reduce costs and achieve your target.

Next, you are going to see some supplier profiles. Your task is to select which of them is the best supplier to provide the new winter collection to Premium Look in your opinion.

Manipulation Module: Position in the Supply Chain

Level: 1st tier Before you start, keep in mind that:

- 1- All potential suppliers are from foreign countries and follow different laws.
- 2- According to Premium Look's code of conduct, suppliers must offer good work conditions to its employees and fair wages.
- 3- In order to reduce costs, you have asked potential suppliers not to outsource any part of production. You want to be able to easily inspect production facilities whenever it is necessary and if anything goes wrong, it is Premium Look's responsibility to solve the problem.

Level: 2nd tier Before you start, keep in mind that:

- 1- All potential suppliers are from foreign countries and follow different laws.
- 2- According to Premium Look's code of conduct, suppliers must offer good work conditions to its employees and fair wages.
- 3- In order to reduce costs, you have asked potential suppliers to outsource production to smaller suppliers. These smaller suppliers are difficult to inspect, but if anything goes wrong, it is not your problem. You can argue Premium Look cannot be held responsible for its suppliers' decision to outsource production.

Manipulation Module: Conflict of institutional elements

Level: Now, imagine the suppliers you are assessing are located in Thailand.

Absence of conflict You know that supplier practices in this region may be against Premium Look's code of conduct, such as: (1) not being aware of employees' health and safety issues, and (2) requesting employees to work 3-4 extra hours a day without paying a premium for it.

Local population thinks such poor working conditions are unacceptable and does not want to have a job under such conditions.

Moreover, Thai laws strictly prohibit such practices.

Level: Now, imagine the suppliers you are assessing are located in Bangladesh.

Existence of conflict You know that supplier practices in this region may be against Premium Look's code of conduct, such as: (1) requesting employees to have long working hours, with normal shift up to 12 hours, and (2) paying wages to workers far below the minimum wages.

However, local population accepts such practices and thinks it is better to have a job under these conditions than having no job at all.

Besides, such practices are in full compliance with Bangladeshi laws.

Manipulation Checks

Item:	According to what you have just read:
Position manipulation	<ol style="list-style-type: none"> 1. You've asked suppliers to outsource production to smaller suppliers 2. Because suppliers are not going to outsource production, it will be easy to inspect production facilities 3. Premium Look cannot be held responsible for its suppliers' outsourcing issues
Conflict manipulation	<ol style="list-style-type: none"> 1. Suppliers' practices in Bangladesh/ Thailand are not in compliance with Premium Look's code of conduct 2. People in Bangladesh/Thailand accept to have a job under poor working conditions 3. Suppliers in Bangladesh/Thailand offer working conditions to its employees that are prohibited by Bangladeshi/Thai law
	<p>5-point Likert scale (1= strongly disagree, 5= strongly agree)</p>

Choice sets

Item:	Please select the best supplier in your opinion. There are no right or wrong answers.		
Block 1	Supplier A Price: \$2.42 (-20% vs current price) – achieves target Quality: Superior Lead time: FOB – 30 days Payment terms: 45 days after delivery	Supplier B Price: \$2.72 (-10% vs current price) – does not achieve target Quality: Satisfactory Lead time: FOB – 60 days Payment terms: 15 days after order	None
Block 2	Supplier C Price: \$2.72 (-10% vs current price) – does not achieve target Quality: Satisfactory Lead time: FOB – 30 days Payment terms: 45 days after delivery	Supplier D Price: \$2.42 (-20% vs current price) – achieves target Quality: Superior Lead time: FOB – 60 days Payment terms: 15 days after order	None
Block 3	Supplier E Price: \$2.72 (-10% vs current price) – does not achieve target Quality: Superior Lead time: FOB – 30 days Payment terms: 15 days after order	Supplier F Price: \$2.42 (-20% vs current price) – achieves target Quality: Satisfactory Lead time: FOB – 60 days Payment terms: 45 days after delivery	None
Block 4	Supplier G Price: \$2.42 (-20% vs current price) – achieves target Quality: Satisfactory Lead time: FOB – 30 days Payment terms: 15 days after order	Supplier H Price: \$2.72 (-10% vs current price) – does not achieve target Quality: Superior Lead time: FOB – 60 days Payment terms: 45 days after delivery	None

Post-experiment questionnaire

Familiarity: How familiar are you with procurement topics?
5-point Likert scale
(1= not at all familiar, 5= extremely familiar)

Age: What is your age? 25 or less / 26-30 / 31-35 / 36-40 / More than 40

Gender: What is your gender? Male / Female

Experience: How many years of work experience do you have? 5 years or less / 6-10 years / 11-15 years / 16-20 years / More than 20 years

Job Title: What is your current job title? If you are not working at the moment, please select your last job title. Student, Researcher or Teacher / Assistant or Analyst / Manager or Director / Other

Nationality: What is your nationality? American / Brazilian / Indian / Other

Feedback: Please feel free to provide us any kind of feedback below about your opinion regarding this experiment.

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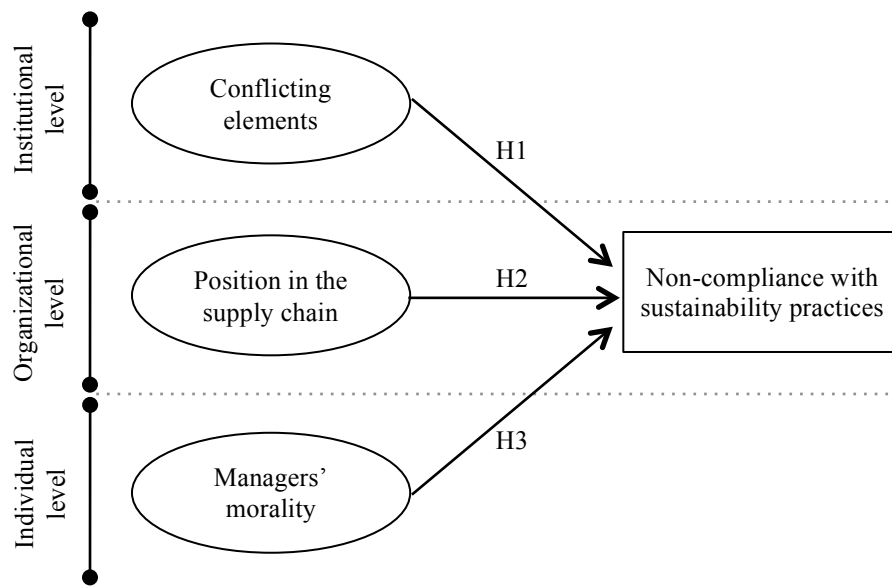


Figure 1 – Conceptual framework of research hypotheses

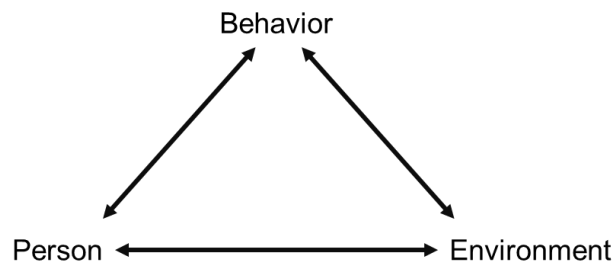


Figure 2 – Triadic reciprocal causation
Source: Bandura, 1986 (p. 24)

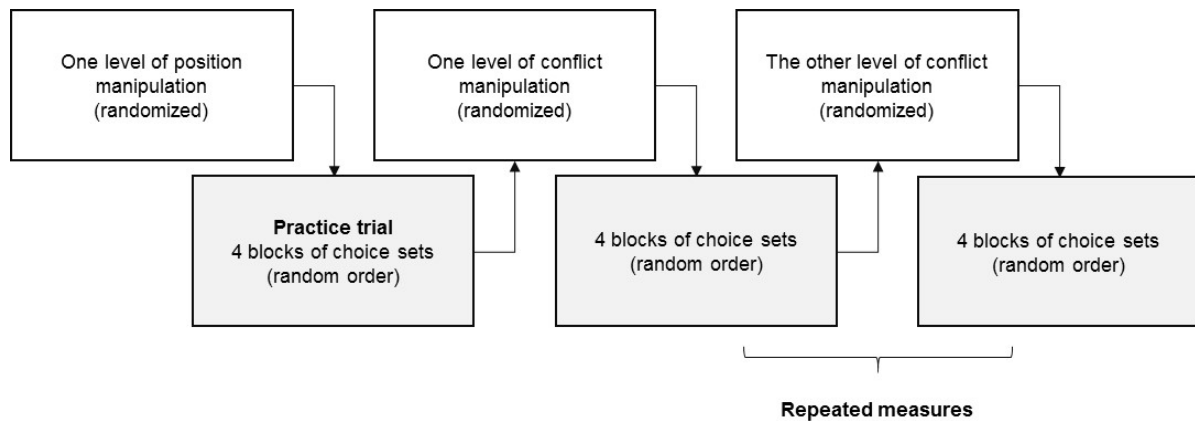


Figure 3 – Manipulations and repeated measures flow