Social sustainability in supply chains: the role of local practices and informal networks

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Abstract

Purpose – The study aims to investigate cultural aspects in supply chains, analysing the effect that local customs may have in the quality of buyer–supplier relationships. Building on the premises of social exchange theory (SET), it concentrates on the impacts that suppliers' use of local practices and informal networks may have in buyers' attitudes and perceptions. The issues addressed and the empirical evidence provided represent initial, yet important steps in the fulfilment of the 'cultural void' within supply chain social sustainability (SCCS) literature.

Design/methodology/approach – Through a role-playing experiment applied to a total sample of 468 participants, the effects of Chinese *guanxi*, Russian *blat*, South Korean *yongo* and Brazilian *jeitinho* on buyers' satisfaction, buyers' commitment, trust and solution severity are measured by their use to access informal networks as solutions to both common (i.e. documentation irregularities) and extraordinary (i.e. modern slavery) supply chain problems.

Findings – Results show that, while the activation of informal networks may impact buyers' perceptions, the use of some local practices by suppliers (i.e. Chinese *guanxi* and Brazilian *jeitinho*) cause greater variations in buyers' attitudes and perceptions than others (i.e. South Korean *yongo* and Russian *blat*), with ethical offences (i.e. modern slavery) and higher levels of buyers' dependency acting as catalysts of these processes.

Originality/value – The investigation of cultural practices typical of economically peripheral countries contributes to the understanding of new facets of buyer–supplier relationships, with the investigation of non-Northwestern practices being particularly important in this regard.

Keywords Supply chain social sustainability, Informal networks, Local practices, Supply chain ethics, Cultural void, Non-Northwestern practices

Paper type Research paper

1. Introduction

Along with demands for social and environmental performance ([Nuber *et al.*, 2020](#)), companies have been increasingly pressured to comply with broader ethical standards

(Park *et al.*, 2017). This implies corporate activities being guided by respect for laws and good practices, with the interests of a wide range of stakeholders being considered. In addressing these issues, the literature on supply chain social sustainability (SCSS) gained prominence in the last decades, focussing on all processes and products that might affect people's welfare (Mani *et al.*, 2015). Not limited to the operations of single companies though, social sustainability assessments have extended across supply chains, placing the activities of buyers and suppliers – as well as that of buyers of buyers and suppliers of suppliers – under constant scrutiny (Villena, 2018).

As operations spread through culturally diverse regions, social transgressions must be even more closely monitored, especially when practices and behaviours that are contrary to organisational values are ingrained in regional cultures (Mani and Gunasekaran, 2018). This may include greater tolerance of corruption, favouritism, or a general non-adherence to formalities. Authors have focussed on a range of practices aimed at combating these and other deviations and, thus, improve social performance in supply chains. In this set, SCSS has served as an umbrella concept, housing diverse aspects of human interaction in buyer–supplier relationships. This comprises issues such as product responsibility, the provision of safe working conditions, equity and philanthropy, amongst others (Mani and Gunasekaran, 2018). Nevertheless, the influence of cultural aspects remains relatively unexplored in the SCSS literature, with research from the perspective of developing or newly developed economies still being on its infancy (Yawar and Seuring, 2017; Mani and Gunasekaran, 2018). Likewise, the consideration of cultural aspects beyond Western Europe and North America (i.e. non-Northwestern) remains limited, albeit the relevance of emerging countries in the global economy. This lack of attention is here argued to represent a "cultural void", which the present study seeks to help fulfilling.

Scholars have alerted for the impact of cultural elements on organisations (e.g. Lee Park and Paiva, 2018; Gupta and Gupta, 2019) and business models (e.g. Chen, 2015), with local practices being portrayed as factors for the comprehension of theories in local contexts. Understood as a set of informal codes and rules that condition individuals' interaction, local practices are argued to play an important role in the determination of people's behaviour, as well as in their interpretation of social actions (Lee Park *et al.*, 2018), leading to the development of informal networks. Customs such as Chinese *guanxi* (Han *et al.*, 2012), Russian *blat* (McCarthy and Puffer, 2008), South-Korean *yongo* (Horak and Klein, 2016) and Brazilian *jeitinho* (Lee Park *et al.*, 2018) would fit the classification, being fundamental to the study of regional business practices in emerging markets. Yet, along with the examination of single cultures, further investigation on their interaction is urgently required.

Building on the premises of social exchange theory (SET) and seeking to offer new insights into this issue, the present research investigates the *misuses of informal networks existing in different national cultures in the quality of buyer–supplier relationships*. Through a role-playing experiment conducted in a sample of 468 participants, we examine the effect of suppliers' use of local practices that are typical of (1) Chinese *guanxi*, (2) Russian *blat*, (3) South-Korean *yongo* and (4) Brazilian *jeitinho* on buyers' satisfaction, commitment, and trust, as well as on their perception of solution severity. We also assess the possible variation of such effects when local practices are employed to treat a relatively ordinary supplying issue (i.e. documentation irregularities) or a major ethical offence (i.e. modern slavery). In addition, we analyse the potential of buyers' dependency to influence these outcomes.

The investigation of cultural elements embedded in buyer–supplier interactions contributes to the understanding of some of the most pressing human factors affecting supply chains (Schorsch *et al.*, 2017). The study also complements previous investigations focussed on the influence of national or cultural elements in supply chain management (e.g. Worthington *et al.*, 2008). The empirical investigation of local practices that are typical to four critical countries in the global economy (China, Russia, South Korea and Brazil) is notably

valuable, as the lessons learnt may contribute to the improvement of the relationships kept with a wide range of players.

This study is organised as follows. The next section presents a literature review on local practices and informal networks, on SCSS and the cultural void and on the SET as the theoretical basis of the relationships tested. These conjectures support the development of the hypotheses of the study in section 3. Section 4 details the method used, followed by our findings, discussion, conclusion and limitations and suggestions for future research (sections 5, 6, 7 and 8, respectively).

2. Literature review

2.1 Local practices and informal networks

Local practices represent a series of informal codes and rules that affect the interaction between individuals, determining their behaviours and interpretations of social action (Lee Park *et al.*, 2018). The perception that one belongs to a culture depends, in many cases, on the extent to which the individual shares cultural values, with *local* elements representing the materialisation of this belonging. Within this perspective, *local practices* have been associated with different cultures, being usually expressed in the form of national idiosyncrasies. By *local*, this research addresses cultural identities, including the conducts and behaviours that are typical of social groups, which international business literature refers to with the term "indigenous" (Hendry, 2005). However, in order to avoid the equivocality of the term "indigenous" – which, beyond the international business conceptualisation and outside scholarly environments, could be vulgarly mistaken for those of native populations – the term "local" has been adopted to express the concept. Table 1 presents the definitions of the four local practices investigated.

These local practices have been chosen for the study as they are typical of countries that are not only culturally significant, bur also critical for the global economy. While China holds an

Local practice	Definition
Chinese *guanxi*	"'Guanxi', in Chinese, has two meanings: general relationships (such as those working relationships, supervisor– subordinate relationships belong to the category), and special relationships (such as those private relationships, amongst family members or friends)". (. . .) "the relationship between a subordinate and their immediate supervisor, and this definition has the sense of 'social connections' based on mutual interest and benefit" (Han *et al.*, 2012, p. 314)
Russian *blat*	"Fragmented societies with strong exclusive network ties amongst the segments and clear-cut dual (. . .) moralities often lack strong inherent social capital. Informal norms of action superimpose [on] formal ones and make the functioning of newly implemented [formal] institutions dysfunctional. They change very slowly. Russia seems to have performed the transition to a market economy but not to a market and civil society; because social capital on the societal level is rather weak, while it has remained rather strong on the personal network level" (Schrader, 2004, p. 391, in: McCarthy and Puffer, 2008, p. 18)
South-Korean *yongo*	"(. . .) particularistic relations maintained by kin, school, or regional ties . . . [which] transcend institutionalised rules and formal prescriptions, [and] can be an efficient alternative to either the market or hierarchy in economic transactions" (Yee, 2000, p. 326; in: Horak and Klein, 2016, p. 676)
Brazilian *jeitinho*	"The Brazilian jeitinho is the informal act of circumventing rules in order to achieve specific goals, balancing between the ethical frontiers of creativity and corruption. Its ethicality (corruption versus creative action) depends on the causes (personal benefits versus altruistic intentions and high versus low assessed pertinence of rules and laws) and the consequences (harm versus no harm to third parties) of using it, as well as the context in which it is employed (serious versus not so serious issue and informal versus formal relationships)" (Lee Park *et al.*, 2018, p. 419)

Table 1.
Definitions of local practices

important role in manufacturing outsourcing and stands as the second largest economy in the world (Singhal and Singhal, 2019), Russia represents a recent transition from a planned economy to something closer to a free-market one (Dolfsma and Grosman, 2019) – with its previous restrictions from the Soviet Union playing a major part on its cultural traits. Brazil, in turn, is a significant agricultural partner to a number of nations (Gale *et al.*, 2019), as well as a large consumer market for their companies (Diniz, 2014). Finally, South Korea configures a recently developed country with strong local characteristics and global enterprises (Song, 2021).

Regarding the specificities of these cultural manifestations, Russian *blat* and Chinese *guanxi* have been described as "personal networks" (Michailova and Worm, 2003), having the former being argued to be one of the bases of "Russia's economy of favours" (Ledeneva, 1998). Accordingly, amongst its main dynamics would be the reciprocal dependence developed between those sharing a relationship. Likewise, although portrayed as important in trust building (Smart and Hsu, 2007) and a core competence to market performance (Gu *et al.*, 2008), Chinese *guanxi* has been linked to corrupt conducts (Smart and Hsu, 2007), what in some cases may involve bribery (Gu *et al.*, 2008). It may be argued that both Russian *blat* and Chinese *guanxi* carry the ambiguity of establishing "positive personal relationships based on cooperation, mutual support and trust that can increase flexibility through gathering and disseminating information and relocating different types of resources in unpredictable and changing environments", while also enabling "possible abuses of political and economic power, and increased corruption" (Lee Park *et al.*, 2018, p. 407).

South Korean *yongo*, in turn, configures "personal relationships in Korea that are attached to affiliation in an informally organized group" (Horak, 2014, p. 87). Beyond reinforcing the bonds between those who see themselves as related, it fosters "flexibility, tolerance, mutual understanding as well as trust" for insiders, while for outsiders, "there can be discrimination and even hostility" (Kim, 2000, p. 179). The Brazilian *jeitinho* has also been argued to infer a dual interpretation containing both creativity and corruption sides. Unlike *blat*, *guanxi* and *yongo*, however, the Brazilian *jeitinho* does not profit from "blood or background ties", but rather may take place "when those ties are weak as long as those involved share a certain friendship" (Lee Park *et al.*, 2018, p. 414).

Within management literature, these issues have translated in the study of local practices and informal networks in a range of topics. Moral analyses or questionings are relatively frequent, with authors examining the ethicality of Chinese *guanxi* (Su and Littlefield, 2001) and that of Brazilian *jeitinho* (Lee Park *et al.*, 2018). The similarities and differences between Chinese *guanxi* and Korean *yongo* have also been assessed (Horak and Taube, 2016), as well as the nature and reach of *yongo* when it comes to trust and network adherence (Horak and Klein, 2016). From a broader perspective, studies have compared the power of different local practices to build influence within organisations (e.g. Smith *et al.*, 2012).

2.2 Supply chain social sustainability and the cultural void

Comprehending basically all the strategies, tactics and efforts directed to the meeting of social performance in supply chains, the notion of SCSS has been used to address a myriad of subjects and situations. Orji *et al.* (2020), for example, study how social media may be useful in the promotion of social good in supply chains, while Venkatesh *et al.* (2020) discuss the employment of blockchain technology as a tool in the achievement of social good amongst supply chain partners. Concentrating on more traditional operations management topics, Nath and Agrawal (2020), in turn, approach agility and lean practices as antecedents of SCSS.

For Mani *et al.* (2016), SCSS would be formed by six underlying dimensions: equity, safety, health and welfare, philanthropy, ethics and human rights. Amongst other things, this includes companies' search to ensure diversity and gender non-discrimination policies in the operations of their supply chain partners (equity), the adherence to strict safety regulations (safety), the availability of health care facilities in supplier locations (health and welfare),

donations to non-governmental organisations for societal development (philanthropy), the establishment of ethical compliance teams (ethics), and the non-employment of sweatshop labour in supplier locations (human rights). Regardless of the fairness or the legitimacy of these questions, they seem to be relatively distant from the realities faced by many suppliers operating in underdeveloped countries, including those composing global value chains in industries such as fast-fashion and electronics.

In addition, while the proposed dimensions encompass many of the social issues forming the current debate on sustainable supply chain management, they seem to be mostly based on a Northwestern perspective, considering traditionally economically developed societies (e.g. Western Europe and North America), but possibly incongruent with those typical of other contexts. The lack of a proper understanding of cultural issues and the adaptation of policies may be at the origin of many of the difficulties observed in the implementation of SCSS programmes. Even contributions that recognise the existence of different sets of social norms between Northwestern lead firms and their Southwestern (e.g. Brazil) and Eastern (e.g. China) suppliers tend to concentrate on firm-specific aspects such as companies' sustainability orientation or organisational cultures (e.g. Mani and Gunasekaran, 2018), not addressing what may be one of the most important causes for failures in the advancement of the sustainability agenda in global value chains. For these reasons, the study of local practices and informal networks are here argued to be an initial step in the fulfilment of the "cultural void" in the way towards social performance in international supply chains. The present investigation does not have the ambition to exhaust such a complex matter, representing, however, a starting effort in this direction.

Attention dedicated by some scholars to issues typical from the periphery of the global economy already instigated important advancements in this direction. Fritz and Silva (2018), for example, analyse the supply chain sustainability literature in Latin America, while Botchie et al. (2021) focus on post-disaster supply chain management in Africa. Lee Park et al. (2018) explore the perception of the Brazilian *jeitinho* when applied to buyer–supplier relationships in Brazil, and Muogboh and Ojadi (2018) analyse supply chain management and logistics management impacted by local approaches in sub-Saharan Africa. It must be noted that some non-Northwestern practices have received significant attention in the last years, such as the Chinese *guanxi*, in a range of supply chain management issues including strategic purchasing, outsourcing and supplier development (Lee and Humphreys, 2007), its influence in supply chain integration (Feng et al., 2017), its application to supply risk management (Cheng et al., 2012), and its potential to reduce the bullwhip effect (Cao et al., 2014). Although research of local idiosyncrasies is essential to advancing "global management knowledge" (Tsui, 2004, p. 491), very few studies in OM/SCM have highlighted other local practices.

2.3 Social exchange theory (SET hereafter), buyers' satisfaction, commitment and trust
Combining aspects of utilitarianism and behaviourism, SET is one of the main theoretical perspectives employed in social psychology (Cook and Rice, 1987), popular in the investigation of social networks, coalition formation, influence, emotions and trust. Initially focused on individual responses upon interaction, it proposes that the behaviour of actors is mutually reinforcing in dyadic exchanges (Homans, 1961). In the investigation of commercial exchanges (e.g. buyer–supplier transactions), SET's assumptions may be pertinent to explain or predict suppliers' satisfaction (Schiele et al., 2012), and useful in the study of different facets of buyers' satisfaction (Shiau and Luo, 2012), when positive feelings would be associated with complex group dynamics, resulting in higher levels of trust and reciprocity. Similarly, buyers' satisfaction is argued to be a key element in the continuity of buyer–supplier relationships, with positive perceptions being based on the fairness of past transactions (Ring and Van de Ven, 1994; Selnes, 1998). The present study builds on these arguments to propose that the employment of local practices by suppliers will impact *buyers' satisfaction*.

Regarding *buyers' commitment*, Kingshott (2006) proposes that commitment would be a central tenant in social exchanges, with the notion evolving as a result of socialisation processes and psychological contracts playing an important role in the building of buyers' engagement. Abdul-Muhmin (2002) complements the perspective, classifying commitment as a key construct in business-to-business relationships (e.g. connections between suppliers and manufacturers), showing that different marketing programmes adopted by foreign suppliers may impact both buyers' satisfaction and commitment.

Set also advocates that *trust* emerges within communities, with the relationships kept amongst individuals reinforcing mutual belief (Luo, 2002). This means that, as group members interact, they tend to create expectations about each other's conducts and behaviours (Williams, 2001), which may diminish relational anxiety and uncertainty (Kramer and Wei, 1999). This may facilitate exchanges of all kinds, ranging from the sharing of sensitive information to commercial dynamics (i.e. buying and selling) (Williams, 2001). Such processes should be favoured when the behaviour of the counterparties is understood as respectful of pre-established norms, whether formal (e.g. laws) or informal (e.g. uses and customs). For Kingshott (2006), psychological contracts would also be important in the development of buyers' trust.

Garbarino and Johnson (1999) propose that the collective measurement of customers' satisfaction, commitment and trust indicate the nature of the relationship between customers and firms, which would stand "on a continuum from transactional to highly relational bonds" (p. 70). Analogously, we propose that, when jointly considered, (1) buyers' satisfaction, (2) buyers' commitment and (3) buyers' trust may represent an approximation of the nature or quality of buyer–supplier relationships. Because judgements around the harshness or austerity of actions and behaviours of one player in the dyad may impact the general perceptions held by counterparts, the construct of *solution severity* completes the group of dependent variables considered in this research, adapted from Maxham and Netemeyer's (2002) understanding, as a perceptual measure on the severity of the different local practices.

3. Hypotheses development

This study is structured around three groups of hypotheses, which investigate: 1) If the employment of informal networks to solve supplying issues is negatively related to the dependent variables; 2) If the employment of different informal networks to solve supplying issues leads to different patterns [1] of responses to the dependent variables; and 3) the relationship between the strength of informal network ties and their impact on the dependent variables. We start by the reasoning supporting the development of the first group.

As discussed by Anderson *et al.* (1994), the notion of satisfaction refers to "an overall evaluation based on the total purchase and consumption experience with a good or service over time" (p. 54). The idea suggests that satisfaction is perceptual in nature, indicating the bundle of evaluations and judgements that a buying part (i.e. buyer) makes of a selling one (i.e. supplier). Thus, while observers' exposure to practices that are consonant with their values may lead to positive perceptions, the contrary should result in feelings of disapproval. For *local practices*, cultural shocks, for example, shall trigger dissatisfactions. It is possible that the employment of Chinese *guanxi* by a supplier comes to be seen as inherently reprehensible by a buyer who is either not familiar with the practice or is not used to it. The same should be true for the three other local practices investigated in the study. Considering SET, arguments linking the nature of dyadic interactions to buyers' satisfaction – as discussed previously – allows for the development of a relationship associating *the use of local practices* (i.e. Chinese *guanxi*, Russian *blat*, Brazilian *jeitinho*, South Korean *yongo*) *to solve supplying issues* (i.e. documentation irregularities, modern slavery) *by accessing informal networks*, *to the impairment of buyers' satisfaction*.

The perception that the supplier is willing to use practices that go against the buyers' values may lead such buyers to understand that the relationship's continuity is not in their interest, or at least that the development of stronger ties should be avoided. The use of *local practices* can, therefore, contribute to the maintenance of buyer–supplier relationships at a transactional level, preventing them from evolving to higher relational bonds. The lack of a relational perspective should, thus, generate a natural decrease in buyers' commitment, with buyers preferring to invest their resources (e.g. time, energy) in the development of relationships with other suppliers. Considering the elements of SET that support the relationship between the nature of dyadic interactions to buyers' commitment, the second hypothesis is proposed, according to which *the use of a local practice* (i.e. Chinese guanxi, Russian blat, Brazilian jeitinho and South Korean yongo) *to solve supplying issues* (i.e. documentation irregularities, modern slavery) *by accessing informal networks should cause a negative impact in buyers' commitment.*

Furthermore, SET proposes that dyadic relationships are related to the development of more solid relationships, with trust appearing as a critical element of these dynamics. Yet, if it is true that the manifestation of specific aspects of a culture may strengthen the bonds of trust between members of the same group, it is also possible that it comes to generate an opposite effect when observed by members of a different culture (Rohner *et al.*, 2013). This may be due to cultural manifestations reinforcing the idea that the observer is facing something unknown, and to which the individual does not belong (Weedon, 2004). Such situations may increase feelings of uncertainty and, therefore, of distrust. *Considering the employment of local practices* (i.e. Chinese *guanxi*, Russian *blat*, Brazilian *jeitinho* and South Korean *yongo*) *as forms of cultural manifestations, one would expect that its use as a solution to supplying issues* (i.e. documentation irregularities, modern slavery) *by accessing informal networks will negatively impact the trust of a counterpart from a different culture.*

Given the generally subtle nature of local practices, it is possible that their use as a solution for a given problem alleviates the perception that the means adopted are drastic or aggressive. This should be even more highlighted when the use of informal solutions is compared with those requiring the activation of mechanisms specifically designed for such purpose (e.g. police authorities, judicial bodies). One might expect then that *the employment of local practices* (typical of Chinese *guanxi*, Russian *blat*, Brazilian *jeitinho*, or South Korean yongo) *by accessing informal networks as a solution to supplying issues* (i.e. documentation irregularities, modern slavery) *will be negatively related to perceptions of solution severity.*

The four mentioned associations support this research's first group of proposed hypotheses:

H1a. The employment of informal networks to solve supplying issues is negatively related to buyer satisfaction.

H1b. The employment of informal networks to solve supplying issues is negatively related to buyer commitment.

H1c. The employment of informal networks to solve supplying issues is negatively related to trust.

H1d. The employment of informal networks to solve supplying issues is negatively related to solution severity.

The reasoning supporting the second group of hypotheses departs from the general premises of the theoretical setting. In this direction, SET summons a "family of conceptual models" (Cropanzano *et al.*, 2017, p. 1) that proposes that "social exchange involves a series of interactions that generate obligations", and that are "usually seen as *interdependent* and contingent on the actions of another person" (Cropanzano and Mitchell, 2005, p. 874).

While this set of "interdependent transactions have the potential to generate high-quality relationships" (Cropanzano and Mitchell, 2005, p. 875), social exchanges would also help enhance connections amongst business partners (Chang *et al.*, 2015). When applied to outsourcing ties, SET has been posited as relevant to understanding partnerships with Southeast Asian, where negotiations are "usually done on a personal level with some leeway provided by top management" (Lee *et al.*, 2010, p. 316). Considering the characteristics that shape distinct local practices, it is possible that the activation of their respective informal networks to solve supplying issues triggers different levels of satisfaction in buyers.

Cultural differences have relevant impacts for "leader–member exchange", for instance, defined as the "quality of the relations between leaders and group members" (Chernyak-Hai and Rabenu, 2018, p. 459). Likewise, when considering distinct cultural contexts and still within SET lenses, cultural factors have been argued to hold an impact on relationships, more specifically on trust and reciprocity (Buchan *et al.*, 2002), and job performance (Lin and Lu, 2021). Correspondingly, the lack of a common and universally accepted set of rules may lead to situations in which practices are considered ethical by one party but unethical by another. In this sense, the potential issues derived from informal networks in supply chains may threaten the way that companies are perceived and, thus, the quality of the buyer–supplier relationship within an intercultural context.

Chu *et al.* (2019) "found that *guanxi* is a more potent strategy in highly uncertain environments and less relevant when extensive relationship-specific assets are involved" (p. 620), whilst Chen *et al.* (2004) record *guanxi*'s negative impact on trust. We propose that buyers' perceptions are conditioned, amongst other things, by the characteristics of the informal networks employed by suppliers, based on the idea that the meeting of actors from different cultural backgrounds may lead to ethical conflicts, particularly when their moral values diverge. As different cultural settings may explicit different social exchange behaviours, it is possible, for example, that buyer dissatisfaction with the solutions employed by suppliers convinces them that the relationships in question are not desirable and, therefore, should not be preserved. Even if relationships with faulty suppliers may not be immediately interrupted, negative judgements on the part of buyers can awaken the idea that new partners must be explored. This means that buyers' perception of cultural manifestation on the part of suppliers may regulate their willingness to invest in the maintenance or development of their relationship, leading to different buyer commitment patterns. Based on these views, we also propose that the employment of different informal networks to solve supplying issues leads to different trust patterns.

Additionally, the fact that informal networks are distinct from each other also implies that they combine different moral aspects, and should, therefore, cause different judgements. In service failure contexts, Smith *et al.* (1999) state that "customers satisfaction judgements will differ by the magnitude of the failure. Specifically, as the size of the loss due to a failure gets larger, the customer will view the exchange as more inequitable and be dissatisfied" (p. 358). We employ Maxham and Netemeyer's (2002) take on "failure severity", in the view that "[c]ustomer evaluations decline as service failures become more severe" (p. 59), to propose that the use of informal networks to deal with problems in supply chains may lead to observers having different perceptions. Buyers could, for instance, assess the adequacy of the solutions to the problems that they intend to address differently, *giving rise to distinct perceptions around their severity.*

These ideas are reflected below on the second groups of hypotheses:

H2a. The employment of different informal networks to solve supplying issues leads to different buyer satisfaction patterns.

H2b. The employment of different informal networks to solve supplying issues leads to different buyer commitment patterns.

H2c. The employment of different informal networks to solve supplying issues leads to different trust patterns.

H2d. The employment of different informal networks to solve supplying issues leads to different perceived solution severity patterns.

The arguments supporting the third groups of hypotheses are built over the main differences of cultural traits. Despite attracting the attention of those who intentionally seek to study them (Boscari *et al.*, 2018), cultural manifestations are, in general, natural to people (Kim, 2017). This means that they represent a spontaneous dynamic reflecting a fluid form of behaviour in a given group. Unlike rehearsed behaviours (e.g. ceremonial), cultural manifestations tend to be comfortable (i.e. do not demand great efforts from those inserted in a given cultural environment), what can contribute to their discretion, and even to the difficulty in detecting them. While some cultural traits are striking and give rise to stereotypes (Luconi, 2011), others remain nearly unnoticed (Poueyto, 2012). The latter would be in the territory of behavioural nuances.

If, on the one hand, the manifestation of cultural aspects can generate negative reactions in the observer (as developed in the first group of hypotheses of the study), it is possible that the activation of some informal networks goes unnoticed, precisely because they are more discreet. In this sense, the different nature of informal networks implies that they are based on different methods and dynamics. With some being more easily perceived than others, it can be assumed that the ones that stand out the most will cause higher levels of rejection from observers. Similarly, those that are better camouflaged should generate less rejection, precisely because they are closer – at least in the observer's perception – to a neutral behaviour.

Amongst the main differences presented by social structures is the strength of the bonds maintained between their members (Sundararajan, 2020). While some are based on more structural relational aspects (e.g. blood issues, community issues, common schooling, factors linked to South Korean *yongo*), others are circumstantial, involving people who, in more acute cases, did not know each other previously (e.g. Brazilian *jeitinho*). In these cases, facing a common problem would act as the connection that leads them to collaborate, albeit occasionally (Lee Park *et al.*, 2018). It is likely, therefore, that the employment of informal networks by individuals who maintain weak ties comes to be less discreet, and therefore, will be more easily perceived by an observer, and could be reflected in a greater rejection. The inverse relationship between the strength of the ties that form a given social network and the degree of rejection of its activation support the development of the third group of hypotheses in the study. In the specific context of the relationships between buyers and suppliers, the activation of informal networks based on stronger relationships – and hence more discreet – is proposed as causing less adverse reactions in the investigated dimensions, as follows.

H3a. The stronger the informal network ties, the weaker the impact of supplying issues on buyer satisfaction patterns.

H3b. The stronger the informal network ties, the weaker the impact of supplying issues on buyer commitment patterns.

H3c. The stronger the informal network ties, the weaker the impact of supplying issues on trust patterns.

H3d. The stronger the informal network ties, the weaker the impact of supplying issues on solution severity patterns.

4. Method

4.1 Experimental study design and data collection

Established in sociological research, scenario-based experiments typically mean the elaboration of a short text carrying "baseline information about the setting that is consistent across all treatments (a common module), and manipulations of the independent variable conveyed by different versions of the scenario (experimental cues modules) that are randomly distributed to participants" (Eckerd *et al.*, 2021, p. 8). The method has been largely considered appropriate when considering managerial decision-making in operations and supply chain settings (Rungtusanatham *et al.*, 2011), having been employed in diverse studies to examine cross-insurance mechanisms in sustainable supply chain management (Fracarolli Nunes *et al.*, 2020), operational similarity and market leadership on knowledge acquisition (Hora and Klassen, 2013) and supply chain contamination (Fracarolli Nunes, 2018) of corporate irresponsibility within the shared resources view (Fracarolli Nunes *et al.*, 2021).

We conducted a scenario-based experiment where respondents were presented with a short scenario and a questionnaire. Scenarios portrayed Company A, a battery manufacturer and Company B, a lithium supplier. Respondents were asked to role-play as Company A's purchasing manager, and were randomly assigned one variation scenario from a combination of the three manipulation factors: type of issue faced by the supplier (*documentation irregularities*, *modern slavery*), dependency on the supplier (*not dependent, dependent*) and informal network solution (neutral case, Chinese *guanxi*, Brazilian *jeitinho*, Russian *blat* and South Korean *yongo*), generating 20 different variations (Supplementary Table S1). Manipulations for the informal network factor were developed by the researchers, and further validated with native colleagues and acquaintances. While the neutral solution portrayed Company B trying to gather the necessary documentation to try to solve its issue, all the local ones featured a contact with a supreme court judge that was expected to help. They nuancedly differed in the way such issue would be solved, depending on the informal network that was being accessed – for the Chinese *guanxi*, emphasis was placed in the utilitarian exchange of favours; in the Brazilian *jeitinho* manipulation, the circumvention of rules was presented as a possibility; for Russian *blat*, the close contact was stressed; and in the South Korean *yongo* scenarios, school and hometown kinship was highlighted.

An initial pool of 609 participants from the USA was recruited from a research crowd-sourcing platform (Prolific Academic, www.prolific.ac). Out of the initial responses, 52 duplicates and 50 incomplete answers were eliminated. A total of 24 participants with a lack of attention were automatically removed, and the remaining 483 valid responses' participants pertaining to six ethnic groups: 80.5% Caucasian, 7.4% black or African American, 5.0% Asian, 3.9% Hispanic, 3.0% multi-racial and 0.2% American Indian or Alaska native. Because different sub-cultural backgrounds may hold an impact on respondents' perspectives on local practices, and being aware of the importance of working with a homogeneous sample, chi-square tests were conducted to confirm the sample's homogeneity for the different ethnic groups in each of the four constructs. As homogeneity was confirmed at the 99% significance level for the four major groups (Caucasian, black or African America, Asian and Hispanic), the responses of the two remaining ones (15 from multi-racial (3%) and 1 from Alaska native (0.2%)) were removed. The final sample of 468 valid individual responses representing the individuals of the most important ethnical groups in the USA was composed of 46.6% female and 53.4% male, and with average and median ages of 37.4 and 39.5 years old, respectively. Further chi-square tests were also performed to ensure homogeneity between the different groups for the two last demographic questions, once more confirmed at the 99% significance level.

4.2 Scenario, manipulation and realism checks
Respondents distinctly rated scenarios as *realistic* (M = 5.64 against the mid-point 4, t(467) = 28.532, p-value < 0.001), *believable* (M = 5.66, t(467) = 29.656, p-value < 0.001) and *likely* (M = 5.49, t(467) = 24.375, p-value < 0.001). Direct questions were also inserted to ensure whether participants correctly understood the scenarios and manipulations that they were reacting to, referring to respondents' role as a purchaser manager working in Company A (M = 6.35 against the mid-point 4, t(467) = 50.383, p-value < 0.001), type of issue (documentation irregularities or modern slavery, M = 6.39, t(467) = 54.287, p-value < 0.001) and informal network accessed by Company B (neutral, Chinese *guanxi*, Brazilian *jeitinho*, Russian *blat* and South Korean *yongo*, M = 6.32, t(467) = 51.659, p-value < 0.001). Furthermore, dependency on supplier (M = 5.02, t(467) = 15.820, p-value < 0.001) was checked based on the previous literature (Ghijsen *et al.*, 2010).

4.3 Measurement scales validation
Scales for *buyer satisfaction* (Ghijsen *et al.*, 2010), *buyer commitment* (Ghijsen *et al.*, 2010), *trust* (Morgan and Hunt, 1994) and *solution severity* (Maxham and Netemeyer, 2002) were adapted from the literature. Each construct was assessed as an individual model and validated through confirmatory factor analysis (CFA) (Supplementary Table S2). While buyer satisfaction and solution severity scales had one item with low standardised item dropped (0.34 and 0.52, respectively), leaving them with three items each, constructs for buyer commitment and trust retained their initial three and six items. Standardised factor loadings remained in their majority above the 0.80 threshold, with one item in the first scale loading above the 0.60 acceptable limit. All four constructs scored composite reliability levels above 0.80, and Cronbach's α (Cronbach, 1951) above 0.80, indicating high internal consistency. Average variance extracted (AVE) values also demonstrate that the representative majority of instruments' variance can be attributed to the operationalised items.

Furthermore, discriminant validity was examined with the comparison between their AVE values and the squared correlation of constructs' possible pairs (Fornell and Larcker, 1981). Even though pairs yielded statistically significant correlations, their individual extracted variances still represented higher values than the shared ones, indicating that discriminant validity was achieved (Supplementary Table S3). Because three out of the four constructs configure saturated models (Kenny and Milan, 2012), unidimensionality was examined by composing a model with the four constructs linked pairwise through covariances. Although the model's χ^2 value loaded significant at the 99% level (χ^2 = 316.943, p-value < 0.001), the χ^2 per degrees of freedom ratio (χ^2/df = 3.773) shows the model's relative efficiency, standing under the five overall acceptable limits. Furthermore, incremental fit indexes exceeded the 0.95 point (CFI = 0.972, IFI = 0.972, and NFI = 0.963), and the root mean square error of approximation (RMSEA = 0.077) all indicate acceptable fit.

5. Findings
Differences in satisfaction, commitment, trust and solution severity were tested through a series of *t*-tests and ANOVAs. While results from the first set of tests show that nearly no statistically significant differences were found between scenarios where all other factors were equal and varying on the local practice (Table 2), when the comparison between scenarios where informal networks were absent and present is examined (Supplementary Table S4), statistically significant differences were found in trust (p-value = 0.042), confirming hypothesis H1c. Hypotheses H1a, H1b and H1d remained unconfirmed. This suggests that informal networks were significantly less impactful on respondents' perceptions than the

		Buyer satisfaction	Buyer commitment	Trust	Solution severity
		Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)
Documentation irregularities, not dependent on supplier					
1 - No informal network	N = 22	4.73(1.09)	5.06(0.87)	4.89(1.16)	4.30(1.31)
2 - Chinese *guanxi*	N = 22	4.61(1.35)	4.71(1.22)	4.76(1.39)	4.77(1.67)
3 - Brazilian *jeitinho*	N = 27	4.58(1.10)	4.79(1.19)	4.22(1.36)	4.83(1.46)
4 - Russian *blat*	N = 23	4.00(1.21)	4.27(1.42)	3.91(1.55)	4.83(1.59)
5 - South-Korean *yongo*	N = 26	4.36(1.12)	4.23(1.49)	4.13(1.52)	4.79(1.47)
Statistics	*p*-value	0.249	0.124	0.095*	0.747
	F	1.370	1.852	2.028	0.485
df (in; within)		4; 115	4; 115	4; 115	4; 115
Documentation irregularities, dependent on supplier					
1 - No informal network	N = 22	4.36(1.43)	4.98(1.62)	4.88(1.13)	5.29(1.31)
2 - Chinese *guanxi*	N = 21	4.31(1.26)	4.77(1.65)	4.14(1.57)	5.06(1.21)
3 - Brazilian *jeitinho*	N = 24	4.76(1.59)	5.18(1.35)	4.33(1.61)	5.34(1.13)
4 - Russian *blat*	N = 20	4.18(1.07)	4.46(1.27)	4.12(1.50)	4.98(1.16)
5 - South-Korean *yongo*	N = 21	4.36(1.46)	4.87(1.37)	4.19(1.50)	5.39(1.27)
Statistics	*p*-value	0.692	0.591	0.406	0.761
	F	0.560	0.703	1.010	0.466
df (in; within)		4; 103	4; 103	4; 103	4; 103
Modern slavery, not dependent on supplier					
1 - No informal network	N = 22	3.33(1.38)	2.85(1.59)	3.15(1.67)	5.50(1.41)
2 - Chinese *guanxi*	N = 24	3.43(1.82)	3.15(1.94)	3.17(1.95)	5.51(1.29)
3 - Brazilian *jeitinho*	N = 27	3.42(1.72)	3.31(1.69)	3.47(1.99)	5.28(1.47)
4 - Russian *blat*	N = 22	4.01(1.76)	3.67(1.79)	3.53(2.06)	5.04(1.67)
5 - South-Korean *yongo*	N = 25	3.26(1.70)	3.25(1.71)	3.15(1.85)	5.17(1.52)
Statistics	*p*-value	0.589	0.644	0.915	0.783
	F	0.706	0.627	0.241	0.435
df (in; within)		4; 115	4; 115	4; 115	4; 115
Modern slavery, dependent on supplier					
1 - No informal network	N = 22	3.77(1.71)	4.25(1.93)	3.66(1.87)	5.77(1.41)
2 - Chinese *guanxi*	N = 25	3.78(1.49)	4.05(1.73)	3.10(1.89)	6.08(1.16)
3 - Brazilian *jeitinho*	N = 27	3.26(1.68)	3.55(1.75)	3.01(1.87)	5.92(0.91)
4 - Russian *blat*	N = 24	3.82(1.52)	3.86(1.86)	3.25(1.88)	5.65(1.46)
5 - South-Korean *yongo*	N = 22	3.89(1.79)	3.51(2.09)	3.21(2.31)	5.44(1.60)
Statistics	*p*-value	0.646	0.609	0.833	0.508
	F	0.624	0.677	0.365	0.831
df (in; within)		4; 115	4; 115	4; 115	4; 115

Table 2.
Anova results for comparison of informal network

Note(s): The numbers in parentheses are sample standard deviations, *$p < 0.10$

type of issue treated, or buyers' dependence on suppliers. The only exception was again found in trust when the document irregularities and not-dependency scenarios are considered. *Post hoc* tests did not, however, point to any specific pair-to-pair difference. Despite their apparent

coherence, such outcomes may not be seen as conclusive. The relatively weak significance values observed reveal a cloudy scenario, with the validation of the results demanding additional analysis. In this sense, the confirmation of the second group or hypotheses offer new perspectives on the issue, particularly in terms of the detection of different response patterns.

Data (Table 3) indicate that, when no informal network solution is proposed, *post-hoc* tests indicate significant differences were found between different types of issues when there is no dependency on supplier on satisfaction (p-value = 0.009), commitment (p-value < 0.001) and trust (p-value = 0.002). When Brazilian *jeitinho* is used to provide a solution to the problem, buyers penalise satisfaction and commitment for modern slavery issues (p-values = 0.025 and 0.003, respectively) if there is no dependency on the supplier. The same is true for Chinese *guanxi* scenarios, not only for satisfaction and commitment, but also for trust (p-values = 0.074, 0.011, 0.013, respectively). When South Korean *yongo* is used to solve the problem, buyers also penalise satisfaction in modern slavery if they are not dependent on suppliers (p-value = 0.048). No significant differences were found on the perceived severity of the local solution, or for scenarios for Russian *blat*. When jointly considered, results support the confirmation of hypotheses 2a, 2b and 2c, with hypothesis 2d remaining unconfirmed.

The results of the study are, to some extent, complementary with the interpretation of the findings for the first group of hypotheses being enriched by the confirmation of the second. While – at a first glance – the use of informal networks by suppliers did not seem to significantly harm the perception of buyers (except for trust as the confirmation of H1c suggests), the study detected different patterns of outcomes, with each of the investigated local practices affecting the set of dependent variables differently. It can be argued, therefore, that what was not fully observed in the first group of hypotheses, turned out to be detected by the second. The fact that different patterns were observed for each of the local practices reveals that the use of these solutions does have an impact on the exchanges between buyers and suppliers.

Although the comparison between the different local practices investigated is useful, the analysis of situations of neutrality might reveal interesting insights. In scenarios where no informal network solution is proposed, the type of issue being treated (i.e. modern slavery or documentation irregularities) showed to be relevant when supplier dependency on buyers is low. As shown in Table 3, this translated into impacts on all of the four dependent variables investigated (i.e. buyer satisfaction, p-value = 0.004; commitment, p-value < 0.001; trust, p-value = 0.001; and solution severity, p-value = 0.001).

Finally, Figure 1 graphically illustrates statistically significant differences found between variation scenarios, and evidences the confirmation of hypotheses 3a, 3b, 3c and 3d, where stronger ties or relationships within the accessed informal network (e.g. as mentioned before, South Korean *yongo* reflected on a weaker impact, whereas the opposite is also suggested for informal network with weaker ties (e.g. Brazilian *jeitinho*), with more differences detected.

6. Discussion
We start by the discussion of results observed for the second group of hypotheses, as they are revealing of the relevance of local practices in the context considered. The negative effects of Brazilian *jeitinho* in buyer satisfaction and commitment, for example, denote that outsiders of the Brazilian culture may interpret the search to accommodate difficult situations as immoral, even if no direct harm was intended by its use. Impacts on buyer's commitment may come from a perception that a long-term relationship with the supplier may not be desirable, leading the buyer to regulate the energy and time to be dedicated to its development. Likewise, negative effects on buyer's satisfaction may be motivated by the negative

		Buyer satisfaction Mean (S.D.)	Buyer commitment Mean (S.D.)	Trust Mean (S.D.)	Solution severity Mean (S.D.)
No informal network					
1 - Document irregularities, not dependent on supplier	N = 22	4.72(1.09)[3]	5.06(0.87)[3]	4.89(1.16)[3][4]	4.30(1.30)[2][3][4]
2 - Document irregularities, dependent on supplier	N = 22	4.36(1.43)[3]	4.98(1.63)[3]	4.89(1.13)[3][4]	5.29(1.32)[1]
3 - Modern slavery, not dependent on supplier	N = 22	3.33(1.39)[1][2]	2.84(1.56)[1][2][4]	3.15(1.67)[1][2]	5.50(1.41)[1]
4 - Modern slavery, dependent on supplier	N = 22	3.77(1.71)	4.25(1.93)[3]	3.66(1.87)[1][2]	5.77(1.41)[1]
Statistics	*p*-value	0.008***	<0.001***	<0.001***	0.004***
	F	4.164	9,563	7,651	4,845
df (in; within)		3; 84	3; 84	3; 84	3; 84
Chinese guanxi					
1 - Document irregularities, not dependent on supplier	N = 22	4.60(1.35)[3]	4.71(1.22)[3]	4.76(1.39)[3][4]	4.77(1.68)[4]
2 - Document irregularities, dependent on supplier	N = 21	4.32(1.27)	4.78(1.65)[3]	4.14(1.57)	5.06(1.21)[4]
3 - Modern slavery, not dependent on supplier	N = 24	3.43(1.82)[1]	3.15(1.95)[1][2]	3.17(1.95)[1]	5.51(1.29)
4 - Modern slavery, dependent on supplier	N = 25	3.79(1.49)	4.05(1.74)	3.75(1.89)[1]	6.08(1.16)[1][2]
Statistics	*p*-value	0.044**	0.004***	0.003***	0.008***
	F	2,971	4,854	4,568	4,539
df (in; within)		3; 88	3; 88	3; 88	3; 88
Brazilian jeitinho					
1 - Document irregularities, not dependent on supplier	N = 27	4.58(1.10)[3][4]	4.79(1.19)[3][4]	4.22(1.36)[4]	4.79(1.46)[4]
2 - Document irregularities, dependent on supplier	N = 24	4.76(1.59)[3][4]	5.18(1.36)[3][4]	4.33(1.61)[4]	5.35(1.14)
3 - Modern slavery, not dependent on supplier	N = 27	3.42(1.72)[1][2]	3.31(1.69)[1][2]	3.47(1.99)	5.28(1.47)
4 - Modern slavery, dependent on supplier	N = 27	3.26(1.68)[1][2]	3.56(1.75)[1][2]	3.02(1.87)[1][2]	5.92(0.91)[1]
Statistics	*p*-value	<0.001***	<0.001***	0.020**	0.016**
	F	6,571	9,394	3,412	3,598
df (in; within)		3; 101	3; 101	3; 101	3; 101
Russian blat					
1 - Document irregularities, not dependent on supplier	N = 23	4.00(1.21)	4.27(1.42)	3.91(1.55)	4.82(1.59)
2 - Document irregularities, dependent on supplier	N = 20	4.18(1.07)	4.46(1.27)	4.11(1.50)	4.98(1.17)
3 - Modern slavery, not dependent on supplier	N = 22	4.01(1.76)	3.66(1.79)	3.53(2.06)	5.04(1.67)

(continued)

Table 3.
Anova results for
conditions within
informal network

		Buyer satisfaction	Buyer commitment	Trust	Solution severity
		Mean (S.D.)	Mean (S.D.)	Mean (S.D.)	Mean (S.D.)
4 - Modern slavery, dependent on supplier	$N = 24$	3.82(1.52)	3.86(1.86)	3.25(1.88)	5.65(1.47)
Statistics	p-value	0.869	0.349	0.374	0.255
	F	0.239	1,113	1,052	1,380
df (in; within)		3; 85	3; 85	3; 85	3; 85
South-Korean yongo					
1 - Document irregularities, not dependent on supplier	$N = 26$	4.36(1.12)[3]	4.23(1.49)	4.19(1.52)	4.79(1.47)
2 - Document irregularities, dependent on supplier	$N = 21$	4.36(1.46)	4.87(1.38)[3][4]	4.19(1.50)	5.39(1.27)
3 - Modern slavery, not dependent on supplier	$N = 25$	3.26(1.70)[1]	3.25(1.72)[2]	3.15(1.86)	5.17(1.52)
4 - Modern slavery, dependent on supplier	$N = 22$	3.89(1.79)	3.51(2.01)[2]	3.21(2.31)	5.44(1.60)
Statistics	p-value	0.045**	0.008***	0.082*	0.410
	F	2,796	4,226	2,304	0.970
df (in; within)		3; 90	3; 90	3; 90	3; 90

Note(s): The numbers in parentheses are sample standard deviations; the numbers in brackets indicate the group means from which this group is significantly different at the 0.10 significance level, as indicated by Tukey's or Games-Howell pairwise comparison test. *p < 0.10; **p < 0.05; ***p < 0.01
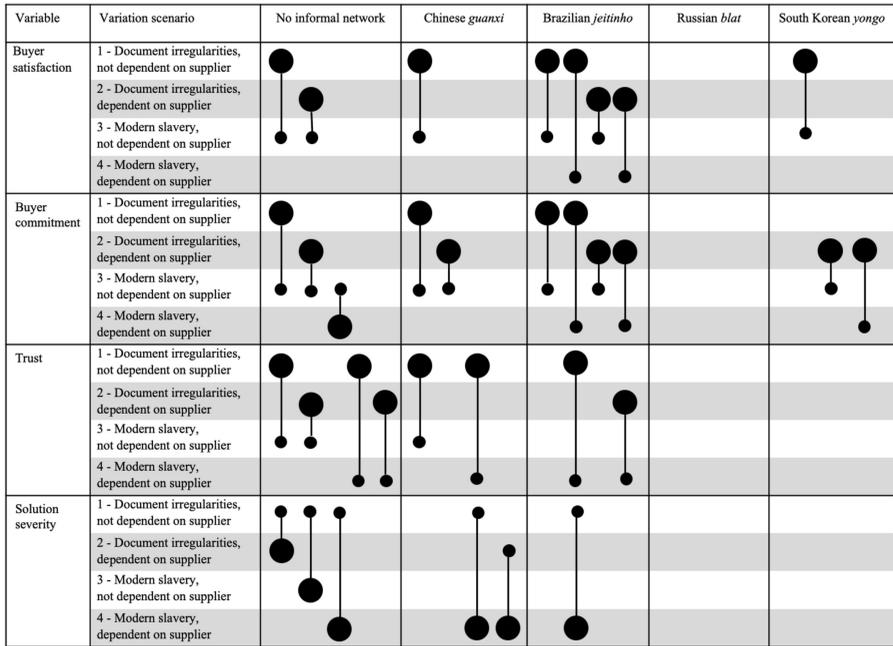
Table 3.

Variable	Variation scenario	No informal network	Chinese *guanxi*	Brazilian *jeitinho*	Russian *blat*	South Korean *yongo*
Buyer satisfaction	1 - Document irregularities, not dependent on supplier					
	2 - Document irregularities, dependent on supplier					
	3 - Modern slavery, not dependent on supplier					
	4 - Modern slavery, dependent on supplier					
Buyer commitment	1 - Document irregularities, not dependent on supplier					
	2 - Document irregularities, dependent on supplier					
	3 - Modern slavery, not dependent on supplier					
	4 - Modern slavery, dependent on supplier					
Trust	1 - Document irregularities, not dependent on supplier					
	2 - Document irregularities, dependent on supplier					
	3 - Modern slavery, not dependent on supplier					
	4 - Modern slavery, dependent on supplier					
Solution severity	1 - Document irregularities, not dependent on supplier					
	2 - Document irregularities, dependent on supplier					
	3 - Modern slavery, not dependent on supplier					
	4 - Modern slavery, dependent on supplier					

Figure 1.
Statistically significant different pairs of constructs per informal network

Note(s): The size of the dots represents their relative value in relationship to the respective statistically significant different pair

judgements around supplier's practices, as their values are shown to be incompatible with those of buyer's.

The lack of negative impacts on trust, however, may reveal the perception that the employment of the Brazilian *jeitinho* is circumstantial, not configuring, therefore, an attitude that must be systematically adopted. Amongst the factors possibly leading to such impression is the fact that the practice is not based on the activation of a social network, but rather, on a momentary affinity of sympathy between the parties involved. Results add to the concerning literature by providing an external view on the practice, offering new elements for the understanding of how it is judged by outsiders.

The negative impacts of Chinese *guanxi* on buyer's satisfaction, commitment and trust suggest that outsiders see the activation of special relationships as unethical, despite it being common amongst insiders of the Chinese culture. These findings are aligned with previous studies that discuss the unethicality of the practice (Chan *et al.*, 2002) and identify proximity of specific *guanxi* types with bribery and corruption (Dunfee and Warren, 2001). While the negative impacts of *guanxi* in buyer's satisfaction and commitment may be explained by factors close to those supporting the effect of Brazilian *jeitinho*, the impairment of trust indicate that buyers believe that suppliers' current practices condition their future ones. The present use of *guanxi* may thus shape the expectations for future exchanges, particularly because the social networks on which it is established tend to be solid and lasting.

Results for Korean *yongo*, in turn, indicate that buyers may see this as less unethical than the two previous, as its negative effects were concentrated on buyer's satisfaction. The fact that *yongo* is cause-based (as opposed to purpose-based), being a predominant way in Korea's social relationships, and it is considered, in principle, ethical (Horak, 2018) supports this aspect of the results. Amongst other reasons, this may be motivated by a greater tolerance to the

access to weaker social ties, as well as by the expectation that new ties may be formed in the future. Thus, buyers may believe that they themselves may come to be part of *yongo* networks as they develop ties and communalities with Korean suppliers. Curiously, no difference was detected in the use of Russian *blat* in any of the variables examined. Buyers may perceive its typical traits as something similar to what is ordinarily practised in business, where personal contacts and privileged relationships may be accepted to some extent. *Blat* has been portrayed as to holding the same ethics as those of friendship relationships (Ledeneva, 2008), what could be a clue in explaining such outcome. Still, the fact that none of the local practices altered solution severity indicates that they are all perceived to be alike in that matter.

The non-confirmation H1a, H1b and H1d, however, demands further consideration. As discussed, in face of their potential to cause rejection from the observer, the employment of local practices and informal networks was expected to negatively impact buyers' perception. The lack of evidence in that direction suggests that cultural manifestations may have their negative effects diluted when applied to treat an issue that could be equally solved without them. The fact that no significant difference was found between the scores relative to individual local practices and the option where none was applied support the idea that, in some cases, buyers may privilege a pragmatic perspective, with the provision of a solution being more important than the ways through which they are provided. The main contribution of these outcomes is to show that, despite being relevant, the impact of local solutions is incremental, and may be analysed in combination with other contextual factors. The confirmation of H1c is the exception in the first group of hypotheses, suggesting that trust do not follow the same logics. The peculiar nature of the construct may partially explain the result, as its building often depends on a greater number of interactions between parts.

The confirmation of the third group of hypotheses, in turn, denotes that eventual negative effects from the use of local practices are inversely proportional to the strength of the links kept between network members. The fact that Brazilian *jeitinho* caused stronger reactions than the other practices is particularly relevant in that regard, as amongst its main characteristics is its focus on conjunctural issues, instead of relational ones. In addition, it is possible that this inverse relationship between the strength of links and impacts on the quality of buyer–supplier relationships is due to the lower chance that buyers themselves come to benefit from some local practices.

Broadly, results reinforce the idea that ethical perceptions vary across cultures. In this sense, the study corroborates the notion that, while one action can be deemed usual in a determined culture, outsiders might see it as corrupt or morally wrong (Muratbekova-Touron *et al.*, 2021). Still, one must recognise the relevance of the additional factors considered in the study, with both the type of issue faced (i.e. modern slavery, documentation irregularities) and the level of buyers' dependency on suppliers also contributing to the observed results. By assessing the misuses of local practices existing in different national cultures in the quality of buyer–supplier relationships, our findings could support the development of *supply chain ethics* as a sub-field around the conducts of professionals involved in exchanges between companies (e.g. buying, selling and information sharing), positioned as a progression of the business ethics literature.

Likewise, the different types of issues considered append the literature on SCSS as, beyond adding to the understanding of moral and ethical questions that are typical of international contexts, they provide the basis for serious offences (e.g. modern slavery) to be tackled more appropriately. From an essentially practical point of view, a better comprehension of the moral values associated with different cultures represents a guide for managers in charge of ensuring that the demands of such nature are respected. In this sense, the current investigation is fully justified as it allows a better understanding of the impacts caused by local practices in non-Northwestern countries, which despite recent deglobalisation trends following the Covid-19 pandemic (Lee and Park, 2020), continue to be

the main source of suppliers for the worldwide production and distribution. This represents an important – although initial – movement in the overcome of the cultural void.

Results also feed the applicability of SET in the analysis of the relationships between buyers and suppliers, with the rationale advocating that, in dyadic relationships, the reactions of one of the parties is conditioned to the attitudes of the other. As discussed previously, these relationships seem to be particularly valid for the dependent variables investigated. Additional considerations on the theoretical and practical contributions of the study are proposed in its conclusion. The demand for goods and services to be delivered increasingly faster and at lower prices (i.e. time and cost-based competition) may push them to solve problems as quickly as possible, sometimes resorting to local practices and/or dubious alternatives from an ethical perspective. From the sustainable development point of view, these dynamics can be understood as illustrative of a classic sustainability trade-off (Fracarolli Nunes *et al.*, 2020; Lee Park *et al.*, 2021), in which social performance is sacrificed for the pursuit of operational efficiency and, ultimately, economic profits.

7. Conclusion
This study explores the use of local practices and informal networks transposed into supply chain contexts and their impact on the quality of buyer–supplier relationships. Through the application of a vignette-based experiment, cultural traits that are typical of Brazilian *jeitinho*, Chinese *guanxi*, Korean *yongo* and Russian *blat* were examined when employed as a solution to both severe and ordinary supply chain issues (i.e. modern slavery and documentation irregularities, respectively). Buyers' dependence on suppliers was also considered as a potential factor influencing their relationships. As for the dependent variables, the constructs of supplier satisfaction, supplier commitment and trust were tested, being jointly considered a proxy of the quality of buyer–supplier relationships. In addition, solution severity was examined, offering extra insights into the effects of local practices in the perception of downstream supply chain partners.

Within a theoretical perspective, these outcomes corroborate the assumptions of SET, reinforcing the idea that it offers useful elements for the explanation or prediction of social interaction. In particular, the demonstration that suppliers' actions may have a direct impact in buyers' perceptions add to the understanding of the mutual influence actors play within dyadic relationships. Beyond offering additional evidence supporting the validity of the theory, the fit denotes its adequacy to the study. Nevertheless, by addressing specific cultural issues, the present investigation broadens the applications of the reasoning, as it is often employed in the examination of social dynamics amongst members of one same group. That adds to the relevance of SET in the analysis of inter-firm relationships as a whole, including supply chains. Moreover, the cultural elements of the study substantiate the operationalisations of SET in international contexts.

The theoretical contributions of the study spill over into managerial implications. Results suggest that suppliers willing to develop long-term relationships with their partners must be cautious, as the use of local practices may negatively impact buyers' perceptions. Depending on how such attitudes are assessed, their employment may constitute feelings of moral and ethical disapproval, which can compromise a counterpart's investment in the development of the relationship. Given this possibility, it is recommended that the actors involved in exchanges with partners from different cultural contexts dedicate themselves to knowing how their cultural practices affect observers. Results may be notably useful for professionals dedicated to managing the architecture of modern global supply chains, as well as for those more directly implicated in business-to-business interfaces, such as vendors and purchasers.

Still from a practical viewpoint, the investigation contributes to the development of more accurate risk models for decision-making processes concerning global supply chains.

By considering issues that are relatively neglected in the field, the study supports the incorporation of more discrete situations, stretching the debate traditionally focussed on operational issues (e.g. disruptions). Our findings contribute, for instance, to a better understanding of cultural idiosyncrasies that could enhance the status of supply chain transactions, while acting to mitigate the risks that companies face in terms of their intangible resources (e.g. corporate image, reputation). The further understanding of the role played by cultural traits may also add to the implementation of direct measures against modern slavery, contributing to the development of more ethical and socially sustainable supply chains (Silva and Figueiredo, 2020).

On its pedagogical value, the study can motivate discussions on cultural aspects in both SCM and sustainable management courses, providing instructors with empirical evidence on the subject. In addition to allowing for the issues treated to be directly addressed, the debates can serve as a background or as an introduction of more general social questions, or so that matters traditionally addressed in the classroom can be equally approached through cultural lenses. The focus on issues often overlooked may also prove relevant for the building of more rigorous discussions on ethical issues in global supply chains. Along with setting the conceptual basis for this construction, the study allows for an intensification of the dialogue between SCM lecturers and those of other disciplines (e.g. business ethics).

Furthermore, as the perspectives of developing countries remain greatly unexplored in the literature (Yawar and Seuring, 2017; Mani and Gunasekaran, 2018), with SCSS scholars usually focussing on aspects that are typical of developed economies, we offer complementary views on this matter. With the consideration of local practices issued from arguably peripherical countries (i.e. outside Europe or North America) providing insights that are closer to the reality of international supply chains, the study represents initial steps in the fulfilment of the "cultural void" in the SCSS literature, with the contrast with current literature supporting the argument that the study is original and contributes to the fulfilment of a relatively wide gap (i.e. the interface of cultural issues, buyers' perspectives and non-Northwestern practices). By no means is it suggested that our inputs do not dialogue with studies in the area. The results and ideas proposed here must be understood in the light of previously acquired knowledge, so that they can serve as an additional point of view for practitioners and scholars.

8. Limitations and future research

Every scientific research is restricted by diverse limitations, with the present study being no exception. However, it is important to mention that this assumption is a common methodological practice in a great number of cross-cultural studies related to Hofstede's (1980) or GLOBE's (House *et al.*, 2004) framework (Naor *et al.*, 2010), which are the most widely used frameworks for national cultures dimensions in Management field. This gives a motivation for further research that considers these different subcultures to improve the accuracy of the results. Still, the investigation is focussed on four countries which, albeit important representatives of non-Northwestern practices, do not exhaust the group. The inclusion of local practices issued from more countries (e.g. South Africa, Argentina, Nigeria, India) must contribute to a better understanding of cultural issues related to SCSS. Furthermore, the respondents come from a single country and future studies could consider perspectives from multiple countries to enhance generalisability of results. However, it should be noted that the USA is considered a macro country comparable to the whole EU, with diverse characteristics (i.e. culturally diverse population, historically formed by immigrants of distinct ethnic, geographic, religious, economic and ideological backgrounds), which somewhat mitigates this limitation.

Future research may also extend our approach to other local practices, and consider including respondents from other countries to test different cultural perspectives, which may be particularly enriching for the debate of social issues in supply chains. Reasoning with our previous arguments, efforts in that direction may add to the contributions of the present

study and help fulfilling the "cultural void". Researchers in the field are invited to build on our findings, as well as to come up with news perspectives on that matter. Their efforts are essential in the way of this complex and arduous path.

Note

1. For the objectives of the present study, patterns are understood as the distinct sets of reactions issued from each of the informal networks investigated.

References

Abdul-Muhmin, A.G. (2002), "Effects of suppliers' marketing program variables on industrial buyers' relationship satisfaction and commitment", *Journal of Business and Industrial Marketing*, Vol. 17 No. 7, pp. 637-651.

Anderson, E.W., Fornell, C. and Lehmann, D.R. (1994), "Customer satisfaction, market share, and profitability: findings from Sweden", *Journal of Marketing*, Vol. 58 No. 3, pp. 53-66.

Boscari, S., Bortolotti, T., Netland, T.H. and Rich, N. (2018), "National culture and operations management: a structured literature review", *International Journal of Production Research*, Vol. 56 No. 18, pp. 6314-6331.

Botchie, D., Damoah, I.S. and Tingbani, I. (2021), "From preparedness to coordination: operational excellence in post-disaster supply chain management in Africa", *Production Planning and Control*, Vol. 32 No. 1, pp. 1-18.

Buchan, N.R., Croson, R.T.A. and Dawes, R.M. (2002), "Swift neighbors and persistent strangers: a cross-cultural investigation of trust and reciprocity in social exchange", *American Journal of Sociology*, Vol. 108 No. 1, pp. 168-206.

Cao, Q., Baker, J. and Schniederjans, D. (2014), "Bullwhip effect reduction and improved business performance through guanxi: an empirical study", *International Journal of Production Economics*, Vol. 158, pp. 217-230.

Chan, R.Y.K., Cheng, L.T.W. and Szeto, R.W.F. (2002), "The dynamics of guanxi and ethics for Chinese executives", *Journal of Business Ethics*, Vol. 41 No. 4, pp. 327-336.

Chang, H.H., Tsai, Y.C., Chen, S.H., Huang, G.H. and Tseng, Y.H. (2015), "Building long-term partnerships by certificate implementation: a social exchange theory perspective", *Journal of Business and Industrial Marketing*, Vol. 30 No. 7, pp. 867-879.

Chen, H. (2015), "A message to Asian SCM and logistics scholars from IJPDLM", *International Journal of Physical Distribution and Logistics Management*, Vol. 45 No. 3, doi: 10.1108/IJPDLM-02-2015-0026.

Chen, C.C., Chen, Y.R. and Xin, K. (2004), "Guanxi practices and trust in management: a procedural justice perspective", *Organization Science*, Vol. 15 No. 2, pp. 200-209.

Cheng, T.C.E., Yip, F.K. and Yeung, A.C.L. (2012), "Supply risk management via *guanxi* in the Chinese business context: the buyer's perspective", *International Journal of Production Economics*, Vol. 139 No. 1, pp. 3-13.

Chernyak-Hai, L. and Rabenu, E. (2018), "The new era workplace relationships: is Social Exchange Theory still relevant?", *Industrial and Organizational Psychology*, Vol. 11 No. 3, pp. 456-481.

Chu, Z., Wang, Q., Lai, F. and Collins, B.J. (2019), "Managing interdependence: using Guanxi to cope with supply chain dependency", *Journal of Business Research*, Vol. 103, pp. 620-631.

Cook, K.S. and Rice, E. (1987), *Social Exchange Theory*, Sage, Newbury Park, CA.

Cronbach, L.J. (1951), "Coefficient alpha and the internal structure of tests", *Psychometrika*, Vol. 16 No. 3, pp. 297-334.

Cropanzano, R. and Mitchell, M.S. (2005), "Social exchange theory: an interdisciplinary review", *Journal of Management*, Vol. 31 No. 6, pp. 874-900.

Cropanzano, R., Anthony, E.L., Daniels, S.R. and Hall, A.V. (2017), "Social Exchange Theory: a critical review with theoretical remedies", *Academy of Management Annals*, Vol. 11 No. 1, pp. 1-38.

Diniz, C. (2014), "The luxury market in Brazil", *The Luxury Market in Brazil: Market Opportunities and Potential*, Palgrave Macmillan, London, pp. 24-42.

Dolfsma, W. and Grosman, A. (2019), "State capitalism revisited: a review of emergent forms and developments", *Journal of Economic Issues*, Vol. 53 No. 2, pp. 579-586.

Dunfee, T.W. and Warren, D.E. (2001), "Is Guanxi ethical? A normative analysis of doing business in China", *Journal of Business Ethics*, Vol. 32, pp. 191-204.

Eckerd, S., DuHadway, S., Bendoly, E., Carter, C.R. and Kaufmann, L. (2021), "On making experimental design choices: discussions on the use and challenges of demand effects, incentives, deception, samples, and vignettes", *Journal of Operations Management*, Vol. 67 No. 2, pp. 261-275.

Feng, M., Yu, W., Chavez, R., Mangan, J. and Zhang, X. (2017), "Guanxi and operational performance: the mediating role of supply chain integration", *Industrial Management and Data Systems*, Vol. 117 No. 8, pp. 1650-1668.

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.

Fracarolli Nunes, M. (2018), "Supply chain contamination: an exploratory approach on the collateral effects of negative corporate events", *European Management Journal*, Vol. 36 No. 4, pp. 573-587.

Fracarolli Nunes, M., Lee Park, C. and Paiva, E.L. (2020), "Can we have it all? Sustainability trade-offs and cross-insurance mechanisms in supply chains", *International Journal of Operations and Production Management*, Vol. 40 No. 9, pp. 1339-1366.

Fracarolli Nunes, M., Lee Park, C. and Shin, H. (2021), "Corporate social and environmental irresponsibilities in supply chains, contamination, and damage of intangible resources: a behavioural approach", *International Journal of Production Economics*, Vol. 241, 108275.

Fritz, M.M.C. and Silva, M.E. (2018), "Exploring supply chain sustainability research in Latin America", *International Journal of Physical Distribution and Logistics Management*, Vol. 48 No. 8, pp. 818-841.

Gale, F., Valdes, C. and Ash, M. (2019), *Interdependence of China, United States, and Brazil in Soybean Trade*, US Department of Agriculture's Economic Research Service (ERS) Report, New York, pp. 1-48.

Garbarino, E. and Johnson, M.S. (1999), "The different roles of satisfaction, trust, and commitment in customer relationships", *Journal of Marketing*, Vol. 63, pp. 70-87.

Ghijsen, P.W.T., Semeijn, J. and Ernstson, S. (2010), "Supplier satisfaction and commitment: The role of influence strategies and supplier development", *Journal of Purchasing and Supply Management*, Vol. 16, pp. 17-26.

Gu, F.F., Hung, K. and Tse, D.K. (2008), "When does guanxi matter? Issues of capitalization and its dark sides", *Journal of Marketing*, Vol. 72 No. 4, pp. 12-28.

Gupta, M. and Gupta, S. (2019), "Influence of national cultures on operations management and supply chain management practices—a research agenda", *Production and Operations Management*, Vol. 28 No. 11, pp. 2681-2698.

Han, Y., Peng, Z. and Zhu, Y. (2012), "Supervisor-subordinate guanxi and trust in supervisor: A qualitative inquiry in the People's Republic of China", *Journal of Business Ethics*, Vol. 108 No. 3, pp. 313-324.

Hendry, J. (2005), *Reclaiming Culture: Indigenous People and Self-Representation*, Springer, New York, Hampshire.

Hofstede, G. (1980), *Culture's Consequences: International Differences in Work-Related Values*, Beverly Hills, Sage Publications, London.

Homans, C.G. (1961), *Social Behaviour: its Elementary Forms*, Harcourt, Brace and World, New York.

Hora, M. and Klassen, R.D. (2013), "Learning from others' misfortune: factors influencing knowledge acquisition to reduce operational risk", *Journal of Operations Management*, Vol. 31 Nos 1-2, pp. 52-61.

Horak, S. (2014), "Antecedents and characteristics of informal relation-based networks in Korea: Yongo, Yonjul and Inmaek", *Asia Pacific Business Review*, Vol. 20 No. 1, pp. 78-108.

Horak, S. (2018), "Join in or opt out? A normative-ethical analysis of affective ties and networks in South Korea", *Journal of Business Ethics*, Vol. 149, pp. 207-220.

Horak, S. and Klein, A. (2016), "Persistence of informal social networks in east Asia: evidence from South Korea", *Asia Pacific Journal of Management*, Vol. 33 No. 3, pp. 673-694.

Horak, S. and Taube, M. (2016), "Same but different? Similarities and fundamental differences of informal social networks in China (Guanxi) and Korea (Yongo)", *Asia Pacific Journal of Management*, Vol. 33 No. 3, pp. 595-616.

House, R.J., Hanges, P.J., Javidan, M., Dorfman, P.W. and Gupta, V. (2004), *Culture, Leadership and Organizations: The GLOBE Study of 62 Societies*, Sage, Thousand Oaks, London, New Delhi.

Kenny, D.A. and Milan, S. (2012), "Identification: a non-technical discussion of a technical issue", in Hoyle, R., Kaplan, D., Marcoulides, G. and West, S. (Eds), *Handbook of Structural Equation Modeling*, Guilford Press, pp. 145-163.

Kim, Y.H. (2000), "Emergence of the network society: trends, new challenges, and an implication for network capitalism", *Korea Journal*, Vol. 40 No. 3, pp. 161-184.

Kim, Y.Y. (2017), "Cross-cultural adaptation", *Oxford Research Encyclopedia of Communication*.

Kingshott, R.P. (2006), "The impact of psychological contracts upon trust and commitment within supplier–buyer relationships: a social exchange view", *Industrial Marketing Management*, Vol. 35 No. 6, pp. 724-739.

Kramer, R.M. and Wei, J. (1999), "Social uncertainty and the problem of trust in social groups: the social self in doubt", in Tyler, T.R., Kramer, R.M. and John, O.P. (Eds), *The Psychology of The Social Self*, Lawrence Erlbaum Associates, New Jersey, pp. 145-168.

Ledeneva, A.V. (1998), *Russia's Economy of Favours. Blat, Networking and Informal Exchange*, Cambridge University Press, Cambridge.

Ledeneva, A.V. (2008), "*Blat and Guanxi:* informal practices in Russia and China", *Comparative Studies in Society and History*, Vol. 50 No. 1, pp. 118-144.

Lee, P.K.C. and Humphreys, P.K. (2007), "The role of Guanxi in supply management practices", *International Journal of Production Economics*, Vol. 106 No. 2, pp. 450-467.

Lee, H.H. and Park, D. (2020), *Post-COVID Asia: Deglobalization, Fourth Industrial Revolution, and Sustainable Development*, World Scientific, Singapore.

Lee, J.W.C., Mohamad, O. and Ramayah, T. (2010), "Outsourcing: is the social exchange theory still relevant in developing countries?", *Journal of Research in Interactive Marketing*, Vol. 4 No. 4, pp. 316-345.

Lee Park, C. and Paiva, E.L. (2018), "How do national cultures impact the operations strategy process?", *International Journal of Operations and Production Management*, Vol. 38 No. 10, pp. 1937-1963.

Lee Park, C., Fracarolli Nunes, M. and Ishizaka, A. (2021), "End-to-end sustainability: trade-offs, consumers' perceptions and decisions beyond B2C interfaces", *Supply Chain Management: An International Journal*. doi: 10.1108/SCM-05-2021-0240 (forthcoming).

Lee Park, C., Fracarolli Nunes, M., Muratbekova-Touron, M. and Moatti, V. (2018), "The duality of the Brazilian *jeitinho*: an empirical investigation and conceptual framework", *Critical Perspectives on International Business*, Vol. 14 No. 4, pp. 404-425.

Lin, C.C. and Lu, C.S. (2021), "Cultural differences and job performance in container shipping: a social exchange theory perspective", *Maritime Policy and Management*. doi: 10.1080/03088839.2021.1975054 (forthcoming).

Luconi, S. (2011), "Discrimination and identity construction: the case of Italian immigrants and their offspring in the USA", *Journal of Intercultural Studies*, Vol. 32 No. 3, pp. 293-307.

Luo, X. (2002), "Trust production and privacy concerns on the Internet: a framework based on relationship marketing and social exchange theory", *Industrial Marketing Management*, Vol. 31 No. 2, pp. 111-118.

Mani, V. and Gunasekaran, A. (2018), "Four forces of supply chain social sustainability adoption in emerging economies", *International Journal of Production Economics*, Vol. 199, pp. 150-161.

Mani, V., Agrawal, R. and Sharma, V. (2015), "Supply chain social sustainability: a comparative case analysis in indian manufacturing industries", *Procedia-Social and Behavioral Sciences*, Vol. 189, pp. 234-251.

Mani, V., Agarwal, R., Gunasekaran, A., Papadopoulos, T., Dubey, R. and Childe, S.J. (2016), "Social sustainability in the supply chain: construct development and measurement validation", *Ecological Indicators*, Vol. 71, pp. 270-279.

Maxham, J.G. III and Netemeyer, R.G. (2002), "A longitudinal study of complaining customers' evaluations of multiple service failures and recovery efforts", *Journal of Marketing*, Vol. 66 No. 4, pp. 20-38.

McCarthy, D.J. and Puffer, S.M. (2008), "Interpreting the ethicality of corporate governance decisions in Russia: utilizing integrative social contracts theory to evaluate the relevance of agency theory norms", *Academy of Management Review*, Vol. 33 No. 1, pp. 11-31.

Michailova, S. and Worm, V. (2003), "Personal networking in Russia and China: *blat* and *guanxi*", *European Management Journal*, Vol. 21 No. 4, pp. 509-519.

Morgan, R.M. and Hunt, S.D. (1994), "The commitment-trust theory of relationship marketing", *Journal of Marketing*, Vol. 58 No. 3, pp. 20-38.

Muogboh, O.S. and Ojadi, F. (2018), *Indigenous Logistics and Supply Chain Management Practice in Africa, Indigenous Management Practices in Africa (Advanced Series in Management)*, Emerald Publishing, Bingley, Vol. 20, pp. 47-70.

Muratbekova-Touron, M., Lee Park, C. and Fracarolli Nunes, M. (2021), "Insider's corruption versus outsider's ethicality? Individual responses to conflicting institutional logics", *International Journal of Human Resource Management*, Vol. 33 No. 19, pp. 3913-3941.

Naor, M., Linderman, K. and Schroeder, R. (2010), "The globalization of operations in Eastern and Western countries: unpacking the relationship between national and organizational culture and its impact on manufacturing performance", *Journal of Operations Management*, Vol. 28, pp. 194-205.

Nath, V. and Agrawal, R. (2020), "Agility and lean practices as antecedents of supply chain social sustainability", *International Journal of Operations and Production Management*, Vol. 40 No. 10, pp. 1589-1611.

Nuber, C., Velte, P. and Hörisch, J. (2020), "The curvilinear and time-lagging impact of sustainability performance on financial performance: evidence from Germany", *Corporate Social Responsibility and Environmental Management*, Vol. 27 No. 1, pp. 232-243.

Orji, I.J., Kusi-Sarpong, S. and Gupta, H.(2020), "The critical success factors of using social media for supply chain social sustainability in the freight logistics industry", *International Journal of Production Research*, Vol. 58 No. 5, pp. 1522-1539.

Park, E., Kim, K.J. and Kwon, S.J. (2017), "Corporate social responsibility as a determinant of consumer loyalty: An examination of ethical standard, satisfaction, and trust", *Journal of Business Research*, Vol. 76, pp. 8-13.

Poueyto, J.L. (2012), *Un patrimoine culturel très discret: le cas des Manouches*, Anthropologie & Sciences Humaines, Terrain, Vol. 58, pp. 130-143.

Ring, P.S. and Van de Ven, A.H. (1994), "Development processes of cooperative interorganizational relationships", *Academy of Management Review*, Vol. 19 No. 1, pp. 90-118.

Rohner, D., Thoenig, M. and Zilibotti, F. (2013), "War signals: a theory of trade, trust, and conflict", *Review of Economic Studies*, Vol. 80 No. 3, pp. 1114-1147.

Rungtusanatham, M., Wallin, C. and Eckerd, S. (2011), "The vignette in a scenario-based role-playing experiment", *Journal of Supply Chain Management*, Vol. 47 No. 3, pp. 9-16.

Schiele, H., Veldman, J., Hüttinger, L. and Pulles, N. (2012), "Towards a social exchange theory perspective on preferred customership — concept and practice", in Bogaschewsky, R., Eßig, M., Lasch, R. and Stölzle, W. (Eds), *Supply Management Research*, Gabler Verlag.

Schorsch, T., Wallenburg, C.M. and Wieland, A. (2017), "The human factor in SCM: introducing a meta-theory of behavioral supply chain management", *International Journal of Physical Distribution and Logistics Management*, Vol. 47 No. 4, pp. 238-262.

Schrader, H. (2004), "Social capital and social transformation in Russia", *Journal of East European Management Studies*, Vol. 9, pp. 391-410.

Selnes, F. (1998), "Antecedents and consequences of trust and satisfaction in buyer-seller relationships", *European Journal of Marketing*, Vol. 32 No. 3, pp. 305-322.

Shiau, W.L. and Luo, M.M. (2012), "Factors affecting online group buying intention and satisfaction: a social exchange theory perspective", *Computers in Human Behavior*, Vol. 28 No. 6, pp. 2431-2444.

Silva, M.E. and Figueiredo, M.D. (2020), "Practicing sustainability for responsible business in supply chains", *Journal of Cleaner Production*, Vol. 251, 119621.

Singhal, K. and Singhal, J. (2019), "Technology and manufacturing in China before the industrial revolution and glimpses of the future", *Production and Operations Management*, Vol. 28 No. 3, pp. 505-515.

Smart, A. and Hsu, C.L. (2007), "Corruption or social capital? Tact and the performance of guanxi in market socialist China", in Nuijten, M. and Anders, G. (Eds), *Corruption and the Secret of Law. A Legal Anthropological Perspective*, Ashgate, Hampshire, pp. 167-190.

Smith, A.K., Bolton, R.N. and Wagner, J. (1999), "A model of customer satisfaction with service encounters involving failure and recovery", *Journal of Marketing Research*, Vol. 36, pp. 356-373.

Smith, P.B., Torres, C., Leong, C.H., Budhwar, P., Achoui, M. and Lebedeva, N. (2012), "Are indigenous approaches to achieving influence in business organizations distinctive? A comparative study of Guanxi, Wasta, Jeitinho, Svyazi and pulling strings", *The International Journal of Human Resource Management*, Vol. 23 No. 2, pp. 333-348.

Song, S. (2021), "When do multinational corporations adjust production volume flexibly among in-network subsidiaries?", *Journal of Business Research*, Vol. 135, pp. 532-542.

Su, C. and Littlefield, J.E. (2001), "Entering Guanxi: a business ethical dilemma in mainland China?", *Journal of Business Ethics*, Vol. 33, pp. 199-210.

Sundararajan, L. (2020), "Strong-ties and weak-ties rationalities: toward an expanded network theory", *Review of General Psychology*, Vol. 24 No. 2, pp. 134-143.

Tsui, A.S. (2004), "Contributing to global management knowledge: a case for high quality indigenous research", *Asia Pacific Journal of Management*, Vol. 21, pp. 491-513.

Venkatesh, V.G., Kang, K., Wang, B., Zhong, R.Y. and Zhang, A. (2020), "System architecture for blockchain based transparency of supply chain social sustainability", *Robotics and Computer-Integrated Manufacturing*, Vol. 63, 101896.

Villena, V.H. (2018), "The missing link? The strategic role of procurement in building sustainable supply networks", *Production and Operations Management*, Vol. 28 No. 5, pp. 1149-1172.

Weedon, C. (2004), *Identity and Culture: Narratives of Difference and Belonging*, McGraw-Hill Education, Berkshire.

Williams, M. (2001), "In whom we trust: group membership as an affective context for trust development", *Academy of Management Review*, Vol. 26 No. 3, pp. 377-396.

Worthington, I., Ram, M., Boyal, H. and Shah, M. (2008), "Researching the drivers of socially responsible purchasing: a cross-national study of supplier diversity initiatives", *Journal of Business Ethics*, Vol. 79 No. 3, pp. 319-331.

Yawar, S.A. and Seuring, S. (2017), "Management of social issues in supply chains: a literature review exploring social issues, actions and performance outcomes", *Journal of Business Ethics*, Vol. 141 No. 3, pp. 621-643.

Yee, J. (2000), "The social networks of Koreans", *Korea Journal*, Vol. 40 No. 1, pp. 325-352.

Supplementary materials

Base module
Company A is one of the largest battery manufacturers in the world. Amongst the main raw materials used by company A is lithium, a metal that composes smartphones' batteries. Company A buys lithium from company B, which ships the material from Africa

Imagine that you are the purchasing manager at Company A, responsible for buying lithium from Company B

First manipulation factor: Type of issue

Documentation irregularities	Recently, Company B was prevented from landing the lithium at the port due to irregularities in the ship's documentation. Company B's manager got in contact with you, as Company A's purchasing manager, to let you know about the delay in delivery and tell you how they are dealing with the problem
Modern slavery	Recently, company B was forced to stop lithium production because it was discovered that it used slave labour in its lithium mines. Company B's manager got in contact with you, as Company A's purchasing manager, to let you know about the delay in delivery and tell you how they are dealing with the problem

Second manipulation factor: Dependency on supplier

Not dependent	Company A and Company B have never signed any type of exclusivity contract, and Company B is one of many suppliers Company A can buy lithium from. If Company B's shipment problem is not solved, Company A can buy lithium from another supplier. In this case, no significant impact on Company A's profits is expected
Dependent	Company A and Company B have signed a long-term exclusivity contract, and Company B is the only supplier Company A can buy lithium from. If Company B's shipment problem is not solved, Company A cannot produce one single battery. In this case, a significantly negative impact on Company A's profits is expected

Third manipulation factor: Informal network solution

No informal network	Company B's managers told you they are trying to sort the issue out with the local authorities. Company B's managers also explained that they are gathering all necessary documentation and working with inspection organisms to try to minimise the delay
Chinese *guanxi*	Company B's managers told you they got in contact with Mr. X, who happened to be a supreme court judge, and asked for help. Company B's managers also explained that they had already helped Mr. X several times in the past, and that they had a relationship of mutual trust and support. Accordingly, Mr. X was expected to help
Brazilian *jeitinho*	Company B's managers told you they got in contact with Mr. X, who happened to be a supreme court judge, and asked for help. Company B's managers also explained that Mr. X was a close friend, and, although he could not intervene directly, he could find a way to provisionally solve the problem. Accordingly, Mr. X was expected to help
Russian *blat*	Company B's managers told you they got in contact with Mr. X, who happened to be a supreme court judge, and asked for help. Company B's managers also explained that Mr. X was an old acquaintance of him, with whom he usually exchanges goods and favours. Accordingly, Mr. X was expected to help
South Korean *yongo*	Company B's managers told you they got in contact with Mr. X, who happened to be a supreme court judge, and asked for help. Company B's managers also explained that they and Mr. X studied in the same school, and were also from the same hometown. Accordingly, Mr. X was expected to help

Table S1.
Experimental study design modules for each manipulation factor

Scale/items	Factor loadings	Cronbach's α	Composite reliability	AVE
Buyer satisfaction (Ghijsen *et al.*, 2010) Anchored by strongly disagree (1) to strongly agree (7)		0.848	0.852	0.663
Dealing with this supplier benefits your company	0.65			
You are satisfied with the dealings with this supplier	0.91			
This supplier is a good company to do business with	0.86			
Buyer commitment (Ghijsen *et al.*, 2010) Anchored by strongly disagree (1) to strongly agree (7)		0.943	0.942	0.846
You see this relationship as a long-term alliance	0.91			
You are committed to the preservation of a good relationship with this supplier	0.93			
Your firm believes in this supplier as a partner	0.92			
Trust (Morgan and Hunt, 1994) Anchored by strongly disagree (1) to strongly agree (7)		0.977	0.977	0.877
This supplier can generally be trusted	0.94			
I trust this supplier	0.95			
I have great confidence in this supplier	0.94			
This supplier has high integrity	0.93			
I can depend on this supplier to do the right thing	0.94			
This supplier can be relied upon	0.92			
Solution severity (Maxham and Netemeyer, 2002) They way Company B chose to deal with its shipment issue is		0.903	0.903	0.757
A minor problem (1)/A major problem (7)	0.86			
A small incident (1)/A big incident (7)	0.89			
A minor aggravation (1)/A major aggravation (7)	0.86			

Table S2.
Measurement models' items and reliabilities

	Buyer satisfaction	Buyer commitment	Trust	Solution severity
Individual-shared variances matrix				
Buyer satisfaction	*0.663*	0.652	0.633	0.067
Buyer commitment		*0.846*	0.611	0.066
Trust			*0.877*	0.091
Solution severity				*0.757*
Correlations matrix				
Buyer satisfaction	1.000	0.808	0.796	−0.259
Buyer commitment	0.000	1.000	0.789	−0.257
Trust	0.000	0.000	1.000	−0.302
Solution severity	0.000	0.000	0.000	1.000

Note(s): For the individual-shared variances matrix, numbers in italic represent constructs' individual variances, numbers above represent squared correlations of each pair of constructs. For the correlation matrix, numbers above the diagonal line represent constructs' correlations, numbers below the diagonal line represent correlations' significance values

Table S3.
Scales' discriminant validity

	N		Mean (S.D.)
Buyer satisfaction			
1 – No informal network	88		4.05 (1.48)
2 – Informal networks	380		3.99 (1.55)
	Statistics	t	0.338
		p-value	0.736
		df	466
Buyer commitment			
1 – No informal network	88		4.29 (1.77)
2 – Informal networks	380		4.08 (1.71)
	Statistics	t	0.999
		p-value	0.318
		df	466
Trust			
1 – No informal network	88		4.15(1.65)
2 – Informal networks	380		3.71 (1.81)
	Statistics	t	2.038
		p-value	0.042**
		df	466
Solution severity			
1 – No informal network	88		5.22 (1.45)
2 – Informal networks	380		5.26 (1.42)
	Statistics	t	−0.285
		p-value	0.776
		df	466

Note(s): Numbers in parentheses are sample standard deviations, $**p < 0.05$

Table S4.
T-tests for comparison
between absence and
presence of informal
networks

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