Sustainable Supplier Selection under Financial Hardships: The Conflicting Impact of Spatial and Temporal Psychological Distances

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Abstract: Economic crises stress trade-offs between costs and sustainability for environmentally orientated firms impacting supply-chain management decisions. Inspired by the disruption to supply caused by the COVID-19 pandemic, we explore supplier selection during a financial crisis, studying the impact of psychological distance on the cost–environmental performance trade-off. Across three experiments (N = 420), we examine the choice between a low-cost and an environmental supplier at close and far psychological distances. Study 1 and Study 2 demonstrate that closer spatial and social distances, respectively, increase the preference for the environmental supplier. Study 3 extends these studies by showing that distance influences perceptions of the firm’s objectives, mediating supplier preference. In contrast, Study 4 shows that a far temporal distance increases the preference for selecting the environmental supplier, differing from spatial distance, due to a reversal in the appraisal of the firm’s objectives. Taken together, our results provide a greater understanding of the cognitive influences on sustainable procurement decision-making during the COVID-19 crisis.

Keywords: sustainable supply chains; supplier choice; psychological distance; COVID-19 financial crisis; sustainable behaviour

1. Introduction

COVID-19 has impacted business operations worldwide, leading to economic crises due to the slowdown of consumption or productivity in many industry sectors. Although similarities exist between COVID-19 and the Global Financial Crisis of 2008–2009 (e.g., frozen credit markets and governments bailouts), the economic causes and implications of the two crises are substantially different. Contrasting the Global Financial Crisis, which was driven by an overleveraged banking system, COVID-19 has created substantial shocks to both supply and demand [1,2]. While the Global Financial Crisis drastically impacted consumer demand, there was no equivalent shock to the supply [1]. Similarly, the impacts from COVID-19 are more severe in terms of breadth of impacts and duration compared to previous epidemics such as SARS and H1N1 [3,4]. While many lessons stemming from organisational responses to the Global Financial Crisis and other health-related crises can potentially be utilised to manage supply-chain problems stemming from COVID-19, the uniqueness of the current pandemic has also created many novel and unprecedented supply-chain challenges [5].

Crisis and disruptions imply uncertainty and unforeseen changes forcing business strategies to remain adaptive. While adaptivity of business orientations can help businesses cope with times of financial turbulence, decision-making remains a key element of steering successful adaptive responses [6]. Crises are characterised by high levels of uncertainty, changes, and time constraints limiting decision-makers’ ability to process the information required to evaluate the alternatives [7,8]. Consequently, managers need to make rapid
decisions, where non-analytical decision-making that attends to contextual cues might render better results [8]. Crisis scenarios also subject decision-makers to even more strenuous pressure and requirements. Thus, understanding how managers make choices in response to contextual and environmental cues during a crisis is paramount to build the required responsiveness for firm survival.

Uncertain business environments following disruptions such as a financial crisis engender different strategic organizational responses that can change the firms’ operations [6]. A significant shift in the business environment from 2008 is the growing importance of responsible business practices, particularly regarding sustainable supply chains. Indeed, over the last decade, there was a substantial increase in research on sustainable supply-chain management. For example, Rajeev et al. [9] find that research in sustainable supply chains increased significantly after 2010 following major industrial catastrophes and crucial international summits. Similarly, Khan et al. [10] find that there were almost six times as many articles studying supply-chain management towards the end of the last decade compared to 10 years earlier during the time of the financial crises. In response to COVID-19, many firms are re-examining their sustainability initiatives and sustainable supply-chain strategies [11]. A critical question for continued improvements in responsible business practices is whether firms with sustainability goals will keep environmental and ethical strategies during and post-COVID-19, given the potential uncertainty of their survival [12].

The current COVID-19 pandemic has created substantial disruptions of supplies, largely attributed to naïve assumptions and short-sighted decisions [13]. Decision-makers may have been either uninformed of their supply-chain risks and resilience or were more concerned with cost abatement than supply-chain security. The substantial disruptions to supply chains from the COVID-19 pandemic has forced firms to source alternative suppliers for both the short and long term [1,4]. As cost reduction is a widely used approach for coping with a firm’s crisis [14], an accessible mechanism within the management of supply chains for reducing expenses is shifting to low-cost suppliers. Traditionally, low-cost suppliers have had poorer sustainability performance [15]. Thus, decision-makers within organizations with sustainability goals may change their focus from aligning with the company’s environmental objectives to reducing costs due to financial pressures resulting from COVID-19.

Despite the simplicity of goals, such as lowering costs, decision-making is not a straightforward process. The supplier-selection literature primarily focuses on mathematical approaches for supplier selection with limited attention to behaviour [16]. Assumptions based on game theory rationality in supply-chain research are that individuals are self-interested and optimise the expected payoffs. However, this theory errs at times because cognitive limitations can keep decision-makers from optimizing [17] or from making choices that are congruous with policy [18]. Wowak et al. [19] explain that psychological factors and beliefs influence executives’ decisions and behaviours, and their choices can be a function of their social relationships [20,21]. Within supply-chain management, there is a substantial literature analysing and explaining how cognitive limitations, non-standard preferences, heuristics (e.g., anchoring, fairness, and reciprocity) ([22] and biases impact operational and strategic decisions [23–26]. In particular, sourcing decisions can be subject to bias from behavioural traits [27]. Accounting for these biases is essential for understanding and improving operations managers’ sourcing decisions and strategies.

Sustainable supplier selection is gaining attention from researchers, following industry trends of incorporating traditional decision-making models into the sustainable supplier-selection processes [28]. Decisions in sustainable sourcing are also likely to deviate from theoretical expectations. Furthermore, decision-making involving sustainability carries an ethical component, which is generally not tractable in analytical supply-chain models. These decision scenarios present ambiguities or conflicts between economic, social, and environmental features [29], i.e., complexities associated with balancing the triple bottom line. For example, decision-makers must often balance suppliers’ environmental and cost performances. Indeed, an increasing number of purchasing managers face challenges
of obtaining suppliers at the lowest price while promoting sustainability in their supply chain [30].

As in general supply-chain problems, decisions with trade-offs involving sustainable suppliers are influenced by contextual cues and scenarios. For example, the ethical culture of a company moderates the managerial preferences between economic and environmental performance [31]. Furthermore, managerial perceptions of stakeholder values impact the purchasing managers’ preferences between ethical (social and ecological) and cost performance of suppliers [30].

Furthermore, managers may be influenced by lead times and the distance to suppliers [32]. According to Construal Level Theory (CLT), the perception of these distances, e.g., temporal and physical distances, collectively known as psychological distances, have vast influences on organizational decision-making [33]. Psychological distance effects on decision-making make seemingly innocuous contextual factors (e.g., the difference in distances to retailer shops or supplier facilities) impact supply decisions [34,35] and decisions regarding sustainability [36]. Accordingly, recent literature reviews emphasise the growing importance of applying Construal Level Theory and psychological distance to study supply chains (e.g., [37,38]). Other theories have been used to study supply-chain issues. For instance, the Theory of Planned Behaviour (TPB) has been used to study green purchasing behaviour [39,40]. The TPB argues that behaviour is influenced by attitudes towards the behaviour, subjective norms such as social pressure, and perceived behavioural control over the complexity of a task [41]. This way, the TPB deals with factors that are contingent on the individual’s perception of his or her social context. Arguably, the positive or negative perception of the task at hand (attitude), the expectations that the individual believes others have on him or her (social pressure), and the confidence that he or she has in the ability to carry out the task. In contrast, Construal Level Theory enables the exploration of factors that are determined by the nature of the supply-chain configuration, such as lead times, location of suppliers, and relationships between procurement agents (e.g., known or unknown, similar or different culture). Therefore, explorations informed by the Construal Level Theory can complement previous studies that look at different psychological factors.

Carter et al. [17] observe that Construal Level Theory and psychological distance can help researchers uncover how supply-chain managers evaluate the trade-off between costs and sustainability, which is a tension increased by the pandemic. Interestingly, van Hoek’s [42] roadmap towards more resilient supply chains includes incorporating more local sourcing (i.e., closer spatial psychological distance) and focusing on long-term efforts (i.e., far temporal psychological distance). Consequently, psychological distances are also inherently built into the strategies of firm responses to the pandemic. However, how contextual cues associated with psychological distance impact sourcing and sustainability decisions is unclear. Given the growing importance of understanding behavioural and sustainable supply chains from a Construal Level Theory perspective, the substantial financial pressures threatening many firms’ continued survival due to COVID-19, and that the responses to pandemics incorporate psychological distances, we explore the following research question: How do psychological distances impact managers’ choices between suppliers differentiated by cost and environmental performance when facing an economic crisis?

To address this research question, we designed experiments to test whether psychological distance impacts sourcing decisions, as this crisis can accentuate the cost–sustainability trade-offs presented by competing suppliers. Accordingly, our experiments differentiated suppliers based on cost and sustainability, manipulated relevant psychological distances, and measured participants’ supplier preferences. Our experiments are set in the context of the supplier decision-making for an SME firm since COVID-19 has had an even greater impact on micro and small firms relative to larger organisations [43]. For example, small businesses are more vulnerable to liquidity issues and are at greater risk in terms of surviving the COVID-19 crisis compared to large firms [44]. Specifically, we focus our experiments on the coffee industry, which has been widely affected by the COVID-19 crisis. The coffee
industry has made substantial improvements across the people, profit, and planet (3Ps) dimensions with initiatives such as fair trade and direct trade [45]; however, the current crisis could undermine these efforts [46]. Coffee is an immensely popular commodity supported by a supply chain of staggering proportions. For instance, in 2018–2019, the world consumed an average of 1.4 billion single espresso cups per day [47]. Coffee farming is a form of livelihood for 125 million people worldwide [48], and its supply chain delivers coffee to countless cafes, shops, households, restaurants, and businesses. Small cafes and coffee shops have been affected by lockdowns and work-from-home restrictions, which have led to reduced operations and shutdowns, with many cafes expected never to reopen. The impact has been so extensive that even larger coffee shop chains are closing points of sale and considering large layoffs [49].

We conducted three studies using vignettes based on the coffee industry, where participants play the role of an operations manager tasked with selecting between a low-cost and an environmental supplier to recommend to their director. Experimental vignettes can facilitate the understanding of procurement behaviour since they provide sufficient realism to secure useful, workable, and reliable data [50,51]. In Study 1, we found that a far [close] spatial distance between the manager’s office to a retail coffee shop increased the preference for the low-cost [environmental] supplier. Study 2 is based on social distance, where we found that a far [close] social distance between the director of the company and the decision-maker (procurement manager) increased the preference for the low-cost [environmental] supplier. Study 3 extends Studies 1 and 2 to uncover the mechanism behind the results obtained in Study 1, positing that the perceived importance of the objectives of the firm is the mediator at work. Study 4 focuses on the temporal distance to the start date of the new supplier’s contract. Interestingly, we found that a far [close] temporal distance led to a greater preference for the environmental [low-cost] supplier. We provide evidence that this reversal is due to the mediating role of perceptions regarding the firm’s future financial stability, which impacts the salience and importance of the competing (i.e., low-cost vs. sustainability) objectives. Overall, our research contributes to the literature by demonstrating the psychological factors and mechanisms that underlie sustainable sourcing decisions under crisis.

The structure of this paper is as follows: Section 2 provides an overview of Construal Level Theory and its application in analysing decision-making in sustainable supply-chain management along with the development of hypotheses for the investigation of the influence of temporal and spatial psychological distances. Section 3 presents the overview, participant selection, and design of the experiments. Section 4 presents the results of the four experiments. Finally, Section 5 includes the concluding remarks along with managerial insights.

2. Background Literature and Hypothesis Development

2.1. Construal Level Theory

Previous research has investigated the sustainable behaviours of consumers using behavioural frameworks [52,53]. Our work uses the cognitive lens of Construal Level Theory because it enables the exploration of how seemingly innocuous contextual stimuli can affect purchasing behaviour [54]. Ahn and Lee [55] used Construal Level Theory to study how consumers’ abstraction level relates to their perceived effort and subsequent intention to engage in corporate social responsibility (CSR) activities. Park and Park [56] conducted a study to investigate the perceptions of Chinese consumers regarding sustainability initiatives by foreign corporations. They found that the construal framing of messages can determine the perceived social distance of the sustainability campaign for ethnocentric consumers [57]. Furthermore, our research helps extends consumer-centred studies to firm behaviour by focusing on the managerial decisions that can shape the range of environmentally friendly options available to consumers.

Construal levels refer to the degree of detail or abstractness in which people represent events and scenarios. Construal Level Theory posits that mental interpretations of objects,
people, situations, and events are represented on a continuum between high (abstract) and low (concrete) construal levels [58]. Thus, a high-level construal refers to a mental representation in broad, generalizable terms that attend to the main features of a phenomenon and a low-level construal corresponds to a representation in concrete, case-specific terms that attend to the peripheral features of a situation [33]. For instance, a high-level construal representation of eating is the obtainment of nutrients, and a low-level construal representation could be having spaghetti Bolognese for dinner. The high-level representation is context-independent, delineated by central and primary features, and can be transported to many circumstances. In contrast, the low-level depiction is context-dependent, delineated by peripheral and secondary features, and requires certain conditions for validity.

The perception of either social, temporal, hypothetical, or physical distances is collectively known as psychological distances, and they have a vast influence on organizational decision-making [33]. For example, a point in time elicits a perceptual notion of its temporal remoteness or closeness; this sense of distance in time is a temporal psychological distance (PD). Psychological distances naturally occur in supply chains; locations give rise to spatial distances, social relations to social distances, lead times to temporal distances, and possible supply disruptions to hypothetical distances. Construal Level Theory also establishes a bi-directional relationship between construal levels and psychological distances (i.e., spatial distances and temporal distances), where farther psychological distances raise construal levels, causing mental representations to become increasingly abstract (and vice versa). Furthermore, the theory establishes that distant objects will be construed at a higher level (abstractly), and closer objects will be construed at a lower level (concretely). In short, from a distance, individuals see the forest, but up close, they see the trees [58].

Differences in psychological distance, which influence construal levels, impact individuals’ information processing. For example, changes in construal levels and psychological distance can shift the focus between desirable and feasible features associated with a decision [59,60]. Desirability responds to the end-state, superordinate high-level aspects (i.e., the why) of a goal, whereas feasibility refers to the mean-state, subordinate low-level aspects (i.e., the how) for achieving the goal [59]. For example, thinking of a vacation at a sandy beach in abstract terms will emphasise its desirability features (i.e., the why): warm weather, resting, and cool drinks by the ocean; whereas, thinking in concrete terms will emphasise its feasibility features (i.e., the how): place, time, transportation, and cost.

Liberman and Trope [59] demonstrated the impact of distance regarding the shift in attention between desirable and feasible features. They manipulated the temporal distance to show that when comparing two software products differentiated by processing speed (desirability) and installation (feasibility), participants placed greater value on feasibility [desirability] when using the software was framed as being one day [year] away. The finding that the temporal distance increases [reduces] the importance of feasibility [desirability] features also holds across spatial distance [60].

Given its influence on information processing, organizational research has applied construal levels and psychological distance to areas such as virtual teams, negotiation, and leadership. For virtual teams separated by geographic distance, Wilson et al. [61] extended Construal Level Theory to link distances to their effects on behaviour group dynamics. Specifically, they showed how psychological distance impacts the interactions and perceptions among distributed teammates. Regarding negotiation, Henderson et al. [62] demonstrated that temporal distance from the realization of a negotiated agreement had several significant implications. Specifically, a further temporal distance increased the willingness to compromise on the lowest-priority issue in exchange for a compromise on the highest-priority issue and greater effort in making offers that benefit both stakeholders [62]. In terms of leadership, when the psychological distance between leaders and followers is large, messages that focus on the desirability of goals have higher effectiveness, and messages that focus on the feasibility of goals have comparatively higher effectiveness when the psychological distance is closer [63].
Despite the many applications of Construal Level Theory and psychological distance to organizational research (see [33]), only a few studies apply Construal Level Theory to study supply-chain decision-making [35,64–66]. Cantor and Macdonald [64] found a relationship between Construal Level Theory and procurement performance with regards to the bullwhip effect. Rogers et al. [65] examined the type of sustainability initiatives buying firms would choose to develop in their suppliers regarding the 3Ps, operationalised through reductions in costs, emissions, and worker injuries. Rogers et al.’s [65] results suggest that psychological distance plays a role in the managers’ choice of trade-offs when driving sustainability initiatives for their suppliers. Kirshner and Moritz [35] recognised that the effects of spatial distance on ordering behaviour are underexplored. Therefore, they examined the effect of temporal and spatial distance on news vendor decisions and found that a far spatial psychological distance resulted in higher orders, which impacted profitability. Although only a few studies consider Construal Level Theory when analysing supply chains, recent reviews have recognised that Construal Level Theory offers significant research opportunities. For example, Pournader et al. [38] noted that Construal Level Theory is among the psychology theories that can help shed light on the tensions faced by decision-makers concerning supply-chain risk, and Carter et al. [17] suggest the use of Construal Level Theory to understand how managers evaluate the inherent trade-offs of the 3Ps with regards to decisions for sustainable supply chain management.

2.2. Hypothesis Development

2.2.1. Spatial Distance

Construal Level Theory shows that differences in psychological distance shift an individual’s focus between the primary and secondary features of a choice scenario [58,67]. Primary features are considerations attached to central and goal-relevant aspects, whereas secondary features are attached to incidental, peripheral aspects of an object [58]. For instance, in Genschow et al. [68] participants had to imitate movements in a key-pressing task at varying spatial distances, where pressing the correct key was the primary goal and using the correct hand was the secondary objective. They found that participants primed with a far [close] spatial distance made fewer primary goal (key) [secondary goal (hand) errors]. They concluded that a far distance enables better focus on the main goals, illustrating how primary features become more salient when the spatial distance is large. The finding that perceived spatial distance increases [reduces] the importance of primary [secondary] features has also been reported by [60].

Spatial distances are ever-present in supply chains and can arise from cues such as the near or distant locations of retail outlets, warehouses, or suppliers. Thus, we expect procurement managers to be influenced by spatial distance when selecting a supplier for a specific retail location that could be far or close to the managers’ place of work. Even though supplier-selection criteria in a sustainability-championing firm would emerge from the company’s strategy, financial hardships from a crisis can increases tensions between cost and environmental performance criteria. For example, the choice between a low-cost supplier of questionable environmental reputation versus a high-cost environmentally friendly supplier becomes more ambiguous if an organization is at a high risk of not surviving the financial crisis due to high costs. Thus, the firm’s primary goal is lowering costs and the secondary goal is upholding sustainability initiatives. Given the relationship between a far [close] spatial distance and focusing on primary [secondary] objectives, we predict a manager will increase [decrease] the weight of cost [environmental performance] at farther [closer] spatial distances, which will drive their preference. Accordingly, we hypothesise:

**Hypothesis 1 (H1).** A far [close] spatial distance will increase the preference for the low-cost [environmentally friendly] supplier.

**Hypothesis 2 (H2).** A far [close] spatial distance will increase the weight given to cost-effectiveness [sustainability] mediating the relationship between distance and supplier choice.
2.2.2. Social Distance

Construal Level Theory has also been used to study the impact of social distances on perceptions because, like spatial distance, social distance impacts the focus on feasibility and desirability. For instance, Liviatan, Trope, and Liberman [69] found that a participant’s judgment of a socially close target (i.e., similar person) was based on secondary features of the target’s performance, whereas a judgment of a socially distant target (i.e., dissimilar person) was based on the primary features of their performance. Furthermore, the CLT informs that social distances can have an influence on choices by directing attention to either the primary or the secondary features of alternatives [70]. Overall, the psychology literature has reported that increased [reduced] social psychological distance increases [reduces] the salience of primary [secondary] features [69,71].

Social psychological distances are tied to the closeness or remoteness of personal connections and can arise in an organizational context. In the case of a firm in times of crisis, where the primary goal is survival by cutting costs and the secondary goal is to uphold sustainability initiatives, the social psychological distance is expected to influence the choice of suppliers that are differentiated by cost and environmentally sustainable performance as follows:


2.2.3. Temporal Distance

The temporal distance also affects evaluations of primary and secondary features, where at a far [close] temporal distance, the primary [secondary] features seem more significant. For example, Trope and Liberman [72] asked participants to imagine buying a radio for listening to the news. The radio was characterised by having good sound quality (primary feature) and a poor clock (secondary feature) or poor sound, but a good clock. Participants were more satisfied with the good-sound/poor-clock radio when the scenario was one year away (far temporal distance), compared to one day away (close temporal distance).

Regarding future projections, temporal distance [proximity] can increase [decrease] confidence. For example, Gilovich et al. [73] found that students had greater confidence in how well they would perform on a test that was a term away compared to the next day. Moreover, Construal Level Theory research indicates greater optimism and confidence at farther temporal distances. Regarding optimism, Shalev et al. [74] found that Construal Level Theory can explain why managers have greater optimism about managing project risks and why they focus more on benefits than costs when evaluating a risk-management plan. As for confidence, findings from Alter et al. [75] support that higher construal levels drive higher degrees of confidence in one’s knowledge. Similarly, Nussbaum et al. [76] showed that people manifested more confidence about an experiment being consistent with theoretical expectations when executed in the distant future compared to the near future. Accordingly, we predict that during an economic crisis, expectations regarding the state of the economy may be more positive for the distant future compared to the near future.

For an environmentally orientated firm facing harsh difficulties due to a current financial crisis, perceptions on the state of the firm may still be negative in the near future, which would lead to prioritizing cost reduction. However, perceptions of the firm’s situation may seem more positive for a distant future state, which could lead to decision-makers prioritizing environmental performance. In other words, a procurement manager situated at a close [far] temporal distance from a supplier’s contract start will have low [increased] optimism about the crisis and its recovery for that point in time. Thus, the manager will regard cost [environmental performance] as a primary objective for the firm and environmental performance [cost] as a secondary objective for the firm at closer [farther] temporal distances. Accordingly, the primary and secondary features could be
reversed in the far temporal distance condition. Adding the effect of temporal distance on the preferences for primary and secondary features, we make the following predictions:

**Hypothesis 4 (H4).** A far [close] temporal distance will increase the preference for the environmentally friendly [low-cost] supplier.

**Hypothesis 5 (H5).** A far [close] temporal distance will decrease [increase] the perceptions of financial austerity, which will increase the weight given to environmental performance [cost effectiveness], mediating the relationship between temporal distance and supplier choice.

3. Materials and Methods

3.1. Study 1 Materials

3.1.1. Overview

Supplier selection should be consistent with a company’s strategy regarding quality, cost, production breaks, delivery time, and supply markets [77]. However, retail outlets can be located at close or far distances from procurement managers deciding on a supply strategy. As psychological distances often impact decision-making, this study explores if the spatial distance between the decision-maker and the focal retail locations affects supplier selection in a time of financial crisis. The manager of an environmentally responsible firm facing financial pressure must choose one of two suppliers that vary in terms of cost and environmental performance.

3.1.2. Participants

The targeted sample size was 100 participants. The sample size was determined using G*Power for using t-tests for examining the differences in means between two independent groups with a medium effect size ($d = 0.5$, $\alpha = 0.05$, $\beta = 0.8$). We recruited 97 participants (42 females; age: $M = 33.351$, $SD = 10.371$) (see descriptive statistics for the demographics for Study 1 in Table A1 in Appendix A) in November 2020 using Mechanical Turk (MTurk), a reliable tool for conducting behavioural research in psychology [78] and operations management [79]. Buhrmester et al. [78] rubberstamped Mturk as a resource that has the elements to complete a research project because the quality of data is acceptable for research in psychology [79].

Lee et al. [79] successfully replicated three well-known operations-management studies using MTurk and concluded that the platform is relevant for studying biases in behavioural operations. The first study was originally performed by Bolton and Katok [80] and investigated factors that could improve decision-making in the news vendor game. The second study replicated a procurement auction to study regret in overbidding in first-price auctions. The third replication was of Loch and Wu’s [81] research that studied how social preferences, such as fairness and reciprocity, determine supply-chain contracting. Lee et al. also provided a comprehensive list of authors who used Mechanical Turk to replicate previous behavioural and decision-making studies with success. Consequently, Lee et al. [79] recognize that Mechanical Turk has gained traction in marketing, behavioural economics, and operations and found evidence that the behaviour of MTurk participants is equivalent to students in a laboratory, who are usually employed in research experiments to act as managers.

Bendoly et al. [82] tested for diversification bias experimentally when placing orders among multiple suppliers in situations with supply and demand uncertainty. Interestingly, they found consistent results across both samples, which were students and MTurk participants. In another study, Ball et al. [83] investigated recall decisions in supply-chain managers using a sample of managers from a firm and replicated the study using MTurk. Their results were also consistent across both samples. In general, it is worth noting that Mechanical Turk is commonly used for vignettes exploring trade-offs in supply chains (e.g., [84–88]) and has been successfully used to manipulate psychological distances (e.g., [35,89,90]).
3.1.3. Design

We tested the effect of spatial distance on supplier selection by designing a vignette that asked participants to depict themselves as the procurement manager of a small set of environmentally friendly coffee shops. While the firm has gone to great lengths to ensure ecological operations, it has been severely impacted by a financial downturn. They were told that the economic crisis has forced the business to reduce costs to remain viable and that sharp savings and cutbacks are required to avoid failure.

In the vignette, participants were tasked by the director with selecting between two coffee bean suppliers of identical quality specifications for one of the firm’s five stores. The first option is a traditional supplier, Low-Cost Café, which is low-cost and reliable but has some history of environmental infractions, which opposes the vision of the business and could harm the company’s reputation. The second option, EcoBeans, is an ecological supplier certified as environmentally compliant, which is aligned with the company’s vision. However, it is 35% more expensive than the traditional low-cost supplier, and due to their sustainable farming, their yields can be unpredictable and could under-deliver, which would disrupt the procurement processes. The two suppliers represent the opposite ends of the cost–sustainability trade-off. Given the scenario description, the primary objective of the business is to lower costs to survive, whereas upholding the sustainability goals is a secondary objective. Thus, the low-cost supplier helps fulfill the primary objective, while the environmentally friendly supplier meets the secondary objective.

Participants were informed that the firm’s five stores vary in distance from the firm’s main office. To induce the manipulation, the participants in the close [far]-distance treatment read that the CEO wants to replace the supplier for the nearest store, located around the corner from the company’s office and less than 1 mile away [the farthest store, located in another state, more than 1200 miles away]. We reinforced the treatment with a follow-up question that required the participants to select from a scale the spatial distance stated in the treatment, followed by a manipulation check asking respondents how near or close they perceived the coffee shop to be. Then, we captured the participants’ preferred supplier. The preferred supplier and manipulation check were recorded using a 7-point scale (definitely Low-Cost Café to definitely EcoBeans). Finally, the participants answered basic demographic questions. For full details on the experimental vignette for study 1 please refer to Supplementary Materials Section S.1.

3.2. Study 2 Materials
3.2.1. Overview

Social distance corresponds to the psychological distance that describes the closeness or remoteness of relationships. It is inherently inside companies and between firms across supply chains. For instance, procurement managers might experience themselves closer to specific directors, managers, teams, employees, or units of a company and further from others. To test the impact of social distance on supplier choice, the vignette from Study 1 was adjusted to manipulate the perceived relationship (e.g., social distance) between the participants and the company’s director.

3.2.2. Participants

One hundred participants (45 females, 1 non-binary; age: $M = 34.080, SD = 11.795$) were recruited in November 2020 using Amazon’s Mechanical Turk. In total, 51 participants were randomly assigned to the far treatment group and 49 participants to the close treatment group. Attention checks were used throughout the scenario to ensure data quality, removing people who failed to correctly answer the questions. Please see Table A2 in Appendix A for the descriptive statistics of the demographics for Study 2.

3.2.3. Design

The effect of social distance on supplier selection was tested. The vignette for this study was largely based on Study 1. The main difference was the treatment; participants in the
close-distance treatment were told that they had a close, informal, and friendly relationship with the director and founder of the company, which denotes a close psychological distance. In the far treatment, they read that their relationship with the same person was strictly professional and somewhat distant, which corresponds with a large psychological distance. Similar to the first study, both the supplier preference and the manipulation check were captured using a 7-point Likert scale. For full details on the experimental vignette for study 2 please refer to Supplementary Materials Section S.2.

3.3. Study 3 Materials

3.3.1. Overview

Our previous study supported the hypothesis that a far psychological distance increases the preference for the low-cost supplier. This hypothesis relied on the relative importance between the sustainable and low-cost features of the supplier. In this study, we extended Study 1 on spatial distance to capture the objective participants thought was more important to the firm between low cost and sustainability. Thus, we obtain a direct measure of the perceived importance that participants attribute to the competing features of the prospective suppliers.

3.3.2. Participants

Our targeted sample size was 160 participants based on the recommendations by Schoemann et al. [91] of at least 150 participants for a mediation model, which is also consistent with the median sample size of participants in the studies reviewed by Fritz and MacKinnon [92]. Overall, we recruited 162 participants (63 females, 2 non-binaries; age: $M = 39.636, SD = 11.247$) in December 2020 using MTurk. Please see Table A3 in Appendix A for the descriptive statistics of the demographics for Study 3.

3.3.3. Design

This experiment used the same vignette as Study 1, but we added a question about the perceived importance of the suppliers’ main distinctive features, cost, and environmental performance, concerning the firm’s priorities. This was captured using a 7-point Likert scale and presented after the participants selected their preferred supplier and before the demographics. For full details on the experimental vignette for study 3 please refer to Supplementary Materials Section S.3.

3.4. Study 4 Materials

3.4.1. Overview

A critical difference between spatial and temporal distances is that distal and proximal temporal distances do not coexist in a specific moment in time, unlike far and close spatial distances. Consequently, when comparing temporal distances, the most remote temporal distance could automatically be associated with a changed context. Accounting for this subtlety, we explored how temporal distance influences supplier choice. Again, we focused on an environmentally responsible firm facing financial pressure due to the economic recession. However, we adjusted the vignette to be based on a coffee roasting distributor (rather than a retailer) that uses various coffee bean suppliers and explicitly stated that the economic recession was due to COVID-19.

3.4.2. Participants

Following Study 3, we targeted 160 participants for our sample size. We recruited 161 participants (86 females, 1 non-binary; age: $M = 43.123, SD = 13.035$) in January 2021 using MTurk. Please see Table A4 in Appendix A for the descriptive statistics of the demographics for Study 4.
3.4.3. Design

We tested the effect of temporal distance on supplier selection. The vignette focuses on a large coffee-roasting company looking to substitute one of its current suppliers. Participants had to choose from a low-cost, but poor-environmental-performance supplier and an environmentally friendly supplier that was 35% more costly than its counterpart. Participants in the close [far]-distance group had to choose a supplier whose contract would start in one month [in 12 months].

Participants answered a manipulation check, their preferred supplier, and which objective between low cost and sustainability was more central to the firm (as in Study 3). We also asked three questions probing how optimistic, confident, and trusting participants felt about the recovery of the economy, providing an indicator of future sentiment. All questions had a 7-point scale. Finally, participants answered the same demographic questions as the previous studies. For full details on the experimental vignette for study 4 please refer to Supplementary Materials Section S.4.

4. Results

4.1. Study 1—Results

First, we tested the manipulation that people perceive the retail store in the far treatment as being more spatially distant than the store in the close treatment. People perceived the close treatment \((M = 1.620, SD = 1.338, 95\% CI [1.240, 2])\) as more spatially proximal than the far treatment \((M = 6.404, SD = 1.014, 95\% CI [6.106, 6.702])\), \(t(91) = −19.915, p < 0.001, d = 4.012\). Thus, the manipulation was successful. Next, we tested for differences between the preferred suppliers across treatments. Participants preferred the environmental supplier in the close treatment \((M = 4.900, SD = 1.764, 95\% CI [4.399, 5.401])\) more than in the far treatment \((M = 4.106, SD = 1.797, 95\% CI [3.579, 4.633]), t(94) = 2.993, p = 0.031, d = 0.446\). Thus, our results indicate a greater preference for the environmentally friendly [low-cost] option in the close [far] treatment. Please see Table A1 in Appendix A for the descriptive statistics of the variables for Study 1.

4.2. Study 2—Results

The manipulation check for the close treatment had a low mean value \((M = 2, SD = 1.291, 95\% CI [1.629, 2.371])\) that was consistent with social proximity, whereas the far treatment had a high mean value \((M = 4.588, SD = 1.499, 95\% CI [4.167, 5]), t(97) = 9.263, p < 0.001, d = 1.847\), congruent with the perception of social remoteness, which shows that priming the participants worked. Regarding the preferred supplier, the mean obtained in the close treatment was comparatively higher \((M = 4.918, SD = 1.812, 95\% CI [4.398, 5.439])\) than the mean obtained in the far treatment \((M = 4.176, SD = 1.763, 95\% CI [3.681, 4.672]), t(98) = 2.074, p = 0.041, d = 0.415\). This shows a preference for the environmentally friendly option in the case of the socially close treatment and a preference for the low-cost supplier for the socially far treatment. Please see Table A2 in Appendix A for the descriptive statistics of the variables for Study 2.

4.3. Study 3—Results

Participants perceived the close distance \((M = 1.613, SD = 1.305, 95\% CI [1.318, 1.908])\) as significantly more proximal than the far treatment \((M = 6.632, SD = 0.790, 95\% CI [6.466, 6.798]), t(118) = −28.846, p < 0.001, d = 4.706\). Thus, the manipulation was effective. For supplier choice, the close treatment had a higher mean value \((M = 4.680, SD = 1.805, 95\% CI [4.272, 5.088])\) than the far treatment \((M = 4.045, SD = 1.935, 95\% CI [3.639, 4.453]), t(159) = 2.143, p = 0.034, d = 0.336\), indicating a greater preference for the environmentally friendly [low-cost] supplier in the close [far] treatment, supporting the findings of Study 1.

Regarding the centrality of the firm’s objectives, the close treatment was comparatively higher \((M = 4.906, SD = 1.498, 95\% CI [4.568, 5.246])\) than the far treatment \((M = 4.379, SD = 1.717, 95\% CI [4.019, 4.740]), t(160) = 2.075, p = 0.039, d = 0.32\), indicating that participants perceived low cost [environmental performance] as the relatively more important
supplier feature in the far [close] condition. This suggests that the perceived importance of the objectives varies across distances. Please see Table A3 in Appendix A for the descriptive statistics of the variables for Study 3.

To formally examine how the perceived importance of the objectives affects the supplier choice, we conducted a mediation analysis using PROCESS Model #4 with 5000 bootstrap samples [93]. Our model includes store location (Distance) as an independent variable (0 = close, 1 = far), supplier choice (Supplier) as the dependent variable, and the importance of the competing trade-offs (Objective) as the mediator. Thus, the full mediation regression model is as follows: Supplier Choice = β0 + β1 Distance + β2 Objective. The indirect effect of Distance → Objective → Supplier is significant, Ind = −0.336, Boot SE = 0.163, 95% CI [−0.653, −0.014] (see Table 1), unlike the direct effect of Distance → Supplier, DE = −0.299, SE = 0.253, 95% CI [−0.798, 0.200], p = 0.239, supporting that the effect of distance on the supplier choice is mediated by the perceived importance of objectives for the firm, which affects the choice of supplier.

Table 1. Study 3: Mediation effects of spatial distance on supplier choice.

<table>
<thead>
<tr>
<th>Mediation Paths</th>
<th>Parameter Estimates</th>
<th>Tests of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance 1 → Objective</td>
<td>−0.528 (0.257)</td>
<td>p = 0.042</td>
</tr>
<tr>
<td>Objective → Supplier</td>
<td>0.636 (0.077)</td>
<td>p &lt; 0.001</td>
</tr>
<tr>
<td>Distance 1 → Supplier</td>
<td>−0.299 (0.253)</td>
<td>p = 0.239</td>
</tr>
<tr>
<td>Bootstrapped Indirect Effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ind: Distance → Objective → Supplier</td>
<td>−0.336 (0.163)</td>
<td>CI: −0.653, −0.014</td>
</tr>
</tbody>
</table>

1 Distance: Far = 1, Close = 0.

4.4. Study 4—Results

The close treatment was perceived as sooner in time (M = 1.753, SD = 0.729, 95% CI [1.594, 1.912]) compared to the far treatment (M = 5.163, SD = 1.018, 95% CI [4.939, 5.386]), t(159) = −24.303, p < 0.001, d = 3.831. Thus, the manipulation was effective. The participants had a greater preference for the low-cost supplier in the close treatment (M = 4.395, SD = 1.973, 95% CI [3.965, 4.825]) and a greater preference for the environmentally friendly supplier in the far treatment (M = 5.163, SD = 1.721, 95% CI [4.785, 5.540]), t(159) = −2.612, p = 0.010, d = 0.412.

The confidence in the future indicator (CIF), the average rating on confidence, trust, and optimism regarding recovery of the economy, was lower in the close treatment (M = 2.449 SD = 1.366, 95% CI [2.151, 2.746]) than in the far treatment (M = 4.679, SD = 1.487, 95% CI [4.353, 5]), t(159) = −9.851, p < 0.001, d = −1.552. Regarding the importance of the objectives for the firm, the participants perceived environmental performance [low cost] as the relatively more important supplier feature in the far (M = 5.150, SD = 1.613, 95% CI [4.796, 5.504]) than in the close condition (M = 3.877, SD = 1.908, 95% CI [3.461, 4.292]), t(159) = −4.542, p < 0.001, d = 0.716. Thus, the confidence in the future and the perceived importance of objectives varies between treatments. Please see Table A4 in Appendix A for the descriptive statistics of the variables for Study 4.

To clarify the relationship between how the variables confidence in the future (CIF) and the objective of the firm (Objective) ultimately affect the supplier choice, we conducted a serial mediation analysis using PROCESS Model #6 with 5000 bootstrap samples [93].

Our model specifies time (Distance) as an independent variable (0 = close, 1 = far), supplier choice (Supplier) as the dependent variable, and confidence in the future (CIF) and the objective of the firm (Objective) as the first and second mediators, respectively. Thus, the full mediation model is: Supplier Choice = β0 + β1 Distance + β2 CIF + β3 Objective. According to the model, the indirect effect of Distance → CIF → Objective → Supplier is significant, Ind3 = 1.077, Boot SE = 0.199, 95% CI [0.733, 1.480] (see Table 2). This supports the hypothesis that the temporal distance’s effect on supplier choice is mediated by the confidence in the eventual recovery of the economy, which affects the perceived
hierarchy of objectives for the firm, influencing the supplier choice. Furthermore, the indirect effect of Distance → Objective → Supplier, Ind2 = −0.017, Boot SE = 0.245, 95% CI [−0.490, 0.477] and the indirect effect of Distance → CIF → Supplier, Ind1 = 0.016, Boot SE = 0.160, 95% CI [−0.316, 0.313] are non-significant and substantially smaller than Ind3. This suggests that the main mechanism of action of time on supplier choice is through the mediation path that connects CIF and Objective (Ind3). Lastly, the effect of Distance → Supplier, DE = −0.309, SE = 0.227, 95% CI [−0.756, 0.139], p = 0.175 is non-significant, further showing that temporal distance’s impact is fully mediated.

5. Discussion

The inherent trade-offs among the 3P dimensions require careful decision-making to attain an appropriate balance [17]. This balance is usually tailored to work under normal economic conditions. For instance, in the coffee industry, avoiding unethical labour practices in coffee farming, despite their short-term cost advantages, is morally responsible and sensible due to the increased demand for fair production practices [46]. However, when the firms’ viability is at risk due to circumstances such as an economic downturn, upholding sustainability initiatives could become untenable [94]. Substantial financial pressures accentuates the 3Ps’ trade-offs, provoking a clash between dimensions [17], where behavioural mechanisms can influence choices. To understand the impact on decision-making, we examined the influence of psychological distances on sourcing decisions focusing on the trade-off between the cost advantage and environmental performance of two distinct suppliers.

Consistent with Construal Level Theory, our results show that further [closer] spatial distances increased the salience of primary [secondary] supplier features, driving supplier preference. Thus, we found support for the prediction that participants in the spatially distant condition (far psychological distance) would prefer the low-cost supplier, whereas participants in the spatially near condition (close psychological distance) would prefer the environmentally friendly supplier. Regarding social distance, it was found that when the relationship with the company’s director was formal and distant (far social distance), participants preferred a low-cost supplier. Conversely, when the relationship with the director was close and informal (close social distance) participants preferred the environmentally friendly supplier. In our third study we determined that the perceived importance of the firm’s objectives acts as a mediator between psychological distance and supplier choice.

In our fourth study, we found that a farther distance in time reverses the supplier preference compared to space. The reversal occurs because a farther temporal distance creates greater optimism towards economic recovery, shifting the prioritization of the firm’s objectives. We provided evidence to support that in the case of temporal distance, optimism acts along with the importance of the objectives as mediators. Ultimately, this suggests that optimism in recovery is critical for upholding environmental performance. It also

Table 2. Study 4: Serial mediation effects of temporal distance on supplier choice.

<table>
<thead>
<tr>
<th>Mediation Paths</th>
<th>Parameter Estimates</th>
<th>Tests of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distance → CIF</td>
<td>2.231 (0.160)</td>
<td>p &lt; 0.001</td>
</tr>
<tr>
<td>CIF → Objective</td>
<td>0.580 (0.087)</td>
<td>p &lt; 0.001</td>
</tr>
<tr>
<td>Distance → Objective</td>
<td>−0.020 (0.315)</td>
<td>p = 0.949</td>
</tr>
<tr>
<td>Objective → Supplier</td>
<td>0.832 (0.057)</td>
<td>p &lt; 0.001</td>
</tr>
<tr>
<td>CIF → Supplier</td>
<td>0.007 (0.071)</td>
<td>p = 0.918</td>
</tr>
<tr>
<td>Distance → Supplier</td>
<td>−0.309 (0.227)</td>
<td>p = 0.175</td>
</tr>
<tr>
<td>Bootstrapped Indirect Effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ind1: Distance → CIF → Supplier</td>
<td>0.0164 (0.160)</td>
<td>CI: [−0.316, 0.313]</td>
</tr>
<tr>
<td>Ind2: Distance → Objective → Supplier</td>
<td>−0.017 (0.245)</td>
<td>CI: [−0.490, 0.477]</td>
</tr>
<tr>
<td>Ind3: Distance → CIF → Objective → Supplier</td>
<td>1.077 (0.190)</td>
<td>CI: 0.734, 1.480</td>
</tr>
</tbody>
</table>

Distance: Far = 1, Close = 0.
suggests that during times not characterised by crisis, we would expect that the primary objective would be based on environmental performance. Thus, our temporal distance results also apply to non-crisis scenarios, since at a farther distance in time, the crisis would have passed and the economy would have recovered. Consequently, our results support that at a far temporal distance the primary objective changes to focus on environmental performance, which reflects behaviour in a non-crisis scenario.

The data collected for the four studies is published in the Supplementary Materials referenced at the end of this manuscript.

5.1. Contributions

Although inspired by the pandemic, our results contribute to a broader perspective of procurement practices and their implications on sustainability during economic recessions. We conclude that a long-term vision that emphasises spatially close sourcing as well as close collaboration with suppliers will promote managers’ focus on environmental performance during times of financial hardship. In contrast, firms that have a farther supplier and short-term focus are more likely to adopt cost-saving measures at the expense of sustainability. Our findings also contribute to the literature by providing evidence of the potential environmental impacts of guidelines of establishing long-term close collaborations with nearby suppliers for achieving resilience against COVID-19-like disruptions. van Hoek’s recommendations provide a mix of psychological distance dimensions, namely, closer spatial distance and farther temporal distance. Interestingly, we find the direction of both dimensions promotes favouring a supplier’s sustainability over financial performance. By exploring supply chain relationships using construal levels, we find support for the hypothesis that these relationships are driven by psychological distances which promote a shift in focus from primary to secondary features of the supplier. Furthermore, the results also support that levels of optimism also influence the relationship. Finally, our findings suggest that in distribution frameworks where sourcing and consumption foster collaboration and are in close proximity, such as short food supply chains, the sustainability features of suppliers are particularly important. This is supported by our observation that close social and spatial distance promote a focus on environmental performance.

5.2. Managerial Insights

While we are agnostic regarding whether firms should focus on their ability to survive the pandemic or should continue to focus on sustainability, we note that sacrificing sustainability performance can have substantial effects beyond increasing the chances of firm survival. Returning to our example of the coffee industry, supplier responses due to the COVID-19 crisis can inflict long-term environmental impacts on the industry. Rhiney et al. [95] argue that the supply-chain disruptions driven by COVID-19 may promote greater investments in non-responsible sourcing, which will hinder the investments of small farmers to combat a renewed epidemic of a deadly plant disease called coffee leaf rust (CLR) fungus. Ultimately, the re-emergence of CLR may ruin entire coffee regions, farmers’ livelihoods, and the ability to fulfil future downstream demand [95]. Beyond environmental impacts, revised sourcing strategies, regulatory relaxation, and supplier auditing difficulties are also raising concerns about increases in modern slavery [96]. In this regard, our research highlights instances where managers might be more prone to focus on reducing sourcing costs, inadvertently contributing to the proliferation of upstream environmental degradation, which may continue after the pandemic subsides.

Our findings highlight the importance of a long-term vision that emphasises spatially and socially close sourcing to promote environmental performance during economic recessions. These strategies can help managers mitigate the risk of environmental degradation caused by supplier responses during economic downturns, as we have illustrated in the case of the coffee industry. We also note that the direction of closer spatial, social, and farther temporal distance can promote a supplier’s sustainability over financial performance,
as suggested by van Hoek’s [42] recommendations of establishing long-term close collabora-
tions with nearby suppliers for achieving resilience against COVID-19-like disruptions.

Overall, our research underscores the need for managers to carefully consider the
psychological distance of suppliers when making procurement decisions and to balance
economic and environmental objectives. In times of financial hardship, a focus on sus-
tainability may be challenging but is critical to avoiding long-term environmental impacts
that can harm the industry, small farmers, and the ability to fulfill downstream demand.
Managers should take a long-term view and prioritize spatially close sourcing to mitigate
these risks and uphold their environmental commitments.

5.3. Limitations

As with most research, there are some limitations to our work. First, our research
focused on American MTurk workers. Future research could extend our results to study
other samples since WEIRD (Western educated industrial rich democratic) countries are
not representative of the entire population [97,98]. Second, our manuscript does not delve
deeply into all aspects of sustainability. Instead, it serves as an initial exploration into the
perception of environmental impact in procurement processes. Therefore, we believe this
research serves as a foundation for future studies on how supply-chain decision-makers
cognitively evaluate specific aspects of sustainability and its trade-offs. Third, the statistical
method used to analyze our results might not be considered as innovative; however, we
believe that the complexity and innovativeness of our research lies in the experimental
formulation, for which the statistical methods used were sufficient. Fourth, as buyers
may establish contracts with several suppliers, future research can explore the relationship
between psychological distance and dual-sourcing decisions in sustainability and crisis
contexts. Furthermore, negotiations often take place before contracting suppliers, and
psychological distance has known impacts on the negotiation processes [62]. Thus, an
interesting avenue for future research is exploring the effects of psychological distance on
the negotiation of supplier contracts.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/su15129561/s1.

Author Contributions: Conceptualization, methodology, data curation, and resources: C.-L.T., S.N.K. and A.B.-M.; formal analysis and investigation, A.B.-M.; writing—original draft preparation, A.B.-M.; writing—review and editing, C.-L.T., S.N.K. and A.B.-M.; supervision, C.-L.T. and S.N.K. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement: This research was undertaken under UNSW Human Re-
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and modified on 04 November 2020 for negligible-risk human research.

Informed Consent Statement: Implied consent was obtained from the participants by their agreeing
to participate in the study as per the negligible-risk research ethics guidelines.

Data Availability Statement: Data are available upon request to the corresponding author.

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all the participants of the study.

Conflicts of Interest: The authors declare no conflict of interest.
Appendix A: Descriptive Statistics of Variables

Table A1. Descriptive statistics for Study 1.

<table>
<thead>
<tr>
<th></th>
<th>Reinforce Distance</th>
<th>Manipulation Check</th>
<th>Supplier Choice</th>
<th>Gender</th>
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<td>Mean</td>
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<td>Std. Error of Mean</td>
<td>0.293</td>
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<td>5.00</td>
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<td>32.00</td>
</tr>
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<td>Mode</td>
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<td>6</td>
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<tr>
<td>Std. Deviation</td>
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<td>1.815</td>
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<td>0.502</td>
<td>10.425</td>
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<td>−0.346</td>
<td>−0.275</td>
<td>0.063</td>
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<td>Std. Error of Skewness</td>
<td>0.245</td>
<td>0.245</td>
<td>0.245</td>
<td>0.245</td>
<td>0.245</td>
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<td>−1.848</td>
<td>−1.204</td>
<td>−1.965</td>
<td>−2.039</td>
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<td>7.00</td>
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<td>1.00</td>
<td>39.00</td>
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</tbody>
</table>

Table A2. Descriptive statistics for Study 2.

<table>
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<th>Reinforce Distance</th>
<th>Manipulation Check</th>
<th>Supplier Choice</th>
<th>Gender</th>
<th>Far</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
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<td>100</td>
<td>100</td>
<td>100</td>
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<tr>
<td>Mean</td>
<td>3.41</td>
<td>3.32</td>
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<td>0.240</td>
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<td>1.00</td>
<td>30.50</td>
</tr>
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<td>2</td>
<td>2</td>
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<tr>
<td>Std. Deviation</td>
<td>2.400</td>
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<td>1.817</td>
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<td>−0.023</td>
<td>−0.041</td>
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<td>0.241</td>
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<td>0.241</td>
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<tr>
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<td>−1.176</td>
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Table A3. Descriptive statistics for Study 3.

<table>
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<tr>
<th>Reinforce Distance</th>
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<th>Supplier Choice</th>
<th>Gender</th>
<th>Far</th>
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Table A4. Descriptive statistics for Study 4.

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<th>Trust</th>
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