



Feeling Close From Afar: The Role of Psychological Distance in Offsetting Distrust in Unfamiliar Online Retailers

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Abstract

E-commerce offers retailers the opportunity to attract new customers online; however, consumer distrust toward unfamiliar retailers can seriously impede these efforts. Construal Level Theory suggests that such distrust can be partially understood in terms of *psychological distance*, and that reducing psychological distance using simple website tactics should overcome distrust and encourage first-time purchases. Studies 1 and 2 show a physically distant retail store, or lack of a physical store altogether, contribute to psychological distance, distrust, and reluctance to purchase online. Studies 2 and 3 further show that website images of an office building (increased tangibility), or the owner's name and appearance (social proximity), can improve trust and purchase intentions by specifically reducing the psychological distance otherwise associated with purely virtual or physically distant retailers.

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Electronic and mobile commerce seem to offer substantial customer base expansion opportunities both for retailers that lack a physical store (i.e., pure retailers) and also for those that have remote or limited bricks-and-mortar locations (i.e., physically distant hybrid retailers; Pauwels and Neslin 2015). However, the lack of consumer trust often associated with online retail represents a significant barrier to such customer acquisition (Benedicktus et al. 2010; Schlosser, White, and Lloyd 2006). Consumer distrust of online vendors is particularly problematic for first-time purchases, because consumers have no direct experience with which to assess the retailer's trustworthiness (Melis et al. 2015; Schlosser, White, and Lloyd 2006; Singh and Sirdeshmukh 2000; Yoon 2002). The challenge faced by online retailers in establishing trust online is highlighted by

survey research that found 60% of US Internet users are extremely or very concerned about scams and fraud related to online shopping, which represents a six percent increase in that figure from two years prior (Microsoft 2014). Although large, established retailers can at least partially overcome online distrust through brand building or by establishing a more intensively distributed network of physical store locations (Benedicktus et al. 2010), these strategies are generally costly and therefore may not be viable for many smaller, less familiar retailers.

Past research suggests that online trust can be improved by factors such as brand familiarity, lower risk perceptions, and favorable inferences about retailer quality (e.g., Benedicktus et al. 2010; Dholakia, Zhao, and Dholakia 2005; Herhausen et al. 2015). Notwithstanding the importance of such factors, the current research adds to our understanding by adopting Construal Level Theory (CLT; Trope and Liberman 2010) as a conceptual framework for understanding the role that a novel factor (psychological distance) can play in determining consumer trust and purchase intentions online. In particular, we show that the lack of consumer trust associated with unfamiliar retailers that are purely virtual (intangible) or have a physically distant retail location stems partly from underlying

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perceptions of the psychological distance involved. We then draw on CLT's interchangeability principle to develop simple, cost effective website strategies that reduce psychological distance, and thereby enhance trust and purchase intentions. The predicted effects of psychological distance are found while accounting for some of the previously established factors that are likely signaled by the presence of a physical store, including perceptions of risk, firm size, and quality.

Our findings have theoretical implications for the CLT literature, as well as strategic implications for online retailers. Theoretically, our research expands the scope of CLT by linking different facets of psychological distance to consumer trust for the first time, using tests of both mediation and moderation. Further, we provide novel empirical evidence for a compensatory effect concerning the joint influence of different facets of psychological distance on consumer judgment (i.e., social distance and tangibility). Managerially, our research offers a framework for simple website strategies that less familiar etailers and physically distant hybrids can draw on to reduce psychological distance associated with first-time purchases, and thereby improve trust and encourage purchase.

The remainder of the paper is organized as follows. First, we define the concept of psychological distance as distinct from, but related to, physical distance. Next, we adopt the CLT multifaceted view of psychological distance and derive its implications for consumer trust and purchase intentions in a multichannel marketing context. We then use this framework to formulate our hypotheses, which are tested in a series of experiments. Studies 1 and 2 initially establish that the existence of a tangible retail store, and its physical distance from consumers, each influence psychological distance and have implications for consumer trust and purchase intentions for first-time purchases. In addition, Studies 2 and 3 test simple, theory-driven alternative strategies that should compensate for the psychological distance otherwise associated with unfamiliar virtual or physically distant retailers. Specifically, Study 2 uses tangible firm imagery (i.e., a picture of an office building) to reduce psychological distance, and thereby increase trust and purchase intentions. Study 3 replicates these building imagery effects and further shows the social proximity facet of psychological distance (e.g., familiarity with the owner) can also alter such perceptions. These findings are consistent with CLT's prediction that the different facets of psychological distance are interchangeable, in that increased tangibility and social closeness each reduce perceptions of psychological distance. Other evidence suggests the role of psychological distance in offsetting distrust is distinct from other explanations, such as retailer quality or online risk perceptions. The paper concludes with a discussion of practical and theoretical implications, as well as future research areas.

Research Background

Construal-Level Theory and Different Facets of Psychological Distance

In this paper, we use the term physical distance in the common sense to refer to the objective, measurable distance between

two points (e.g., miles). One of the most basic suggestions of CLT is that physical and psychological distance are related but imperfectly correlated, and that physical distance impacts judgment and decision making through its effects on psychological distance (Fujita et al. 2006). Psychological distance is defined as the degree to which an object is *perceived* to be tangible or immediately present in terms of the here-and-now (Liberman, Trope, and Stephan 2007; Trope and Liberman 2010). The international and interpersonal relationship literatures (e.g., Chang, Polachek, and Robst 2004; Conway and Swift 2000; Lyndon, Pierce, and O'Regan 1997) lend support to the distinction between physical and psychological dimensions of distance, and further find that physical distance explains between 44% and 73% of the variance in psychological distance (Briggs 1973; Coshall 1985; Phipps 1979). Thus, one implication of CLT is that, ceteris paribus, a hybrid retailer with a local store should be perceived as more psychologically proximal than a hybrid retailer with a physically distant store, and that any effects of physical distance on consumer judgment should be at least partly explained by psychological distance.

In addition to physical distance, CLT suggests psychological distance also has a number of other facets, including: hypotheticality (i.e., perceptions that something is real or tangible versus imaginary), social distance (i.e., the degree of personal closeness or connection), and temporal distance (i.e., present time vs. distant future or past). The hypotheticality facet implies that a hybrid retailer should be perceived as less psychologically distant than a purely virtual retailer due to the greater tangibility offered by the existence of its physical retail space. Moreover, this should be true even if the physical distance of the hybrid store is too great to be of any meaningful convenience or service benefit. That is, the *mere presence of a physical store*, even at great physical distance, should be sufficient to create a reduced sense of psychological distance relative to a purely virtual retailer. Broadly, CLT suggests that both the existence of a bricks and mortar store (tangibility) and its physical distance should have similar effects on consumer judgment via psychological distance.

The multifaceted nature of psychological distance has other important implications for etailers and multichannel retailers. In particular, these different facets are said to share a common currency, and therefore are interchangeable in terms of their effects on psychological distance and judgment (Trope and Liberman 2003). This aspect of the CLT model has been empirically supported in numerous studies that show: (1) one dimension of psychological distance affects perceptions of other dimensions (e.g., social distance impacts judgments of physical distance); (2) different dimensions of psychological distance can have parallel effects on judgment (e.g., social and temporal distance have comparable effects on attributions); and (3) different dimensions of psychological distance manipulated in the same context can have interactive effects on judgment (Kim, Zhang, and Li 2008; Trope and Liberman 2010; Zhao and Xie 2011). Importantly, CLT's common currency or interchangeability postulate implies that it should be possible to compensate for the physical distance of a retail store (remote hybrids) or lack of a physical retail space (etailers) without the cost of developing a network of retail

locations. For instance, this compensation could be accomplished by increasing tangibility in other ways, or by fostering social closeness to the retailer. This led us to examine website media that either makes the retailer seem more tangible (e.g., pictures of an office building) or socially closer (e.g., familiarity with the owner) as alternate means of reducing psychological distance.

Construal, Psychological Distance, Trust, and Purchase Intentions

The main outcomes for the effects of psychological distance considered in the current studies are judgments of retailer trustworthiness and online purchase intentions. Trust is defined as a willingness to rely on an exchange partner's reliability and integrity, and the belief that the actions of the trusted party will result in positive outcomes (Morgan and Hunt 1994). Increased consumer trust is known to generate higher purchase intentions both online and in traditional purchase settings (Aguirre et al. 2015; Benedicktus et al. 2010). In contrast to the acknowledged effects of branding factors on consumer trust (e.g., equity, reputation), this research focuses on trust formed in the first purchase encounter with a previously unknown retailer. Online retailing is a particularly difficult setting to establish such initial trust (Schlosser, White, and Lloyd 2006), because many consumers distrust virtual retailers by default (Vara and Mangalindan 2006). This may be for good reason, given industry research that finds 70% of US Internet users experienced some form of scam or fraud in 2014 (Microsoft 2014). Such fraud can cause consumers to make the broad generalization that online retailers are untrustworthy as a whole, and subsequently stereotype individual retailers as untrustworthy by association with the larger group (Darke and Ritchie 2007; Pavlou and Gefen 2004).

A central proposal of CLT is that increased psychological distance evokes the use of more generalized, category-based mental representations in guiding consumer judgment (Bar-Anan, Liberman, and Trope 2006; Trope and Liberman 2010). Given that stereotypes are a good example of such representations (McCrea, Wieber, and Myers 2012), it follows that judgments of a retailer at greater psychological distance should reflect the broader negative stereotype that retailers cannot be trusted. The link between psychological distance and trust is indirectly supported by existing research. For instance, social proximity and mutual trust are said to be important predictors of relationship success (Swift 1999), and relationships over great distances are known to be fertile ground for mistrust (Gatignon and Anderson 1988). Frequent interaction is believed to foster both trust and perceptions of closeness (Swift 1999). Thus, psychological distance threatens trust and endangers the continuity of relationships, whereas psychological proximity seems to stimulate both trust and relationship success (Harwood and Lin 2000). This background suggests that distrust and lower purchase intentions are likely to be significant downstream consequences of psychological distance.

Summary

Based on the above, we argue that many unfamiliaretailers and physically remote hybrid retailers face a challenge in terms of consumer perceptions of trust and purchase intentions, which our CLT framework suggests are partly attributed to perceptions of psychological distance. Both the lack of tangibility associated with a pureetailer or the physical distance of a hybrid with a remote geographic location should be perceived as more psychologically distant than hybrids with a tangible bricks-and-mortar store that is physically closer to the consumer. Finally, CLT suggests pureetailers should be able to better acquire distant customers by reducing perceptions of psychological distance through strategies designed to tap its different facets (tangibility, social distance or temporal distance). Specific predictions follow in the context of a series of experiments designed to test these ideas.

Study 1: Effects of a Physical Store on Psychological Distance, Trust, and Purchase Intentions

Because this is the first study to examine psychological distance as it applies to multichannel retailers, we considered it important to establish the proposed relationship between the presence or absence of a local retail store and its psychological distance, as well as the attendant effects on trust and purchase intentions. Thus, the first study compared a local hybrid to a pureetailer. Hybrid and pureetailers differ in terms of the tangibility of the physical store, which CLT predicts should cause the latter to seem more psychologically distant. In turn, we expect that psychological distance will relate to trust and purchase intentions, such that psychologically distant retailers are less trusted and preferred. This reasoning led to the initial CLT predictions that:

H1. In the context of first encounters with an unfamiliar retailer, hybrid retailers will (a) be less psychologically distant, (b) be more trusted, and (c) have higher purchase intentions than pureetailers.

H2. Perceptions of psychological distance will mediate any experimental effects on trust and purchase intentions.

This first study also was used to create a measure of psychological distance in order to provide evidence for the proposed mechanism. It was further important to examine alternative explanations and additional mediating mechanisms that may explain the benefits of a physical store. For instance, the existence of a physical store might imply a better quality retailer, which could translate into increased trust and purchase intentions. Perceptions of risk also might play some part, given that Internet purchases are often perceived as risky (Bodur, Klein, and Arora 2015), and the ability to visit a physical store might help alleviate such risks. A physical store could also imply a larger firm size, with a greater resource base (Pauwels and Neslin 2015). Measures of retailer quality, risk perceptions, and estimated firm size were therefore included.

Procedure. Ninety-seven undergraduate business students were randomly assigned to one of three experimental retailer conditions: real hybrid versus fictitious hybrid versus fictitious virtual only. Each participant began by visiting a mock-up of a website and were told that their task was to decide on a pair of diamond earrings as a gift for a close loved one. Each pair of earrings was priced within the stated budget of \$300, and evaluated by the retailer as at least F (colorless) and VS2 (no imperfections visible to the naked eye) in terms of color and clarity. Diamond earrings provided an ideal purchase context because jewelry is a high involvement category and consumers generally have to rely on the retailer for information about quality (e.g., color and clarity of the stones), implying that retailer trustworthiness is an important consideration (Benedicktus et al. 2010). The purchase was presented as a gift to eliminate the possibility that the category might otherwise be of low relevance to non-jewelry-wearing participants. All participants reviewed the retailer's website, evaluated three pairs of diamond earrings, chose a pair, and then proceeded to the questionnaire.

The instructions for the hybrid conditions indicated the company had "a physical retail store located in" [the local city], whereas the virtual retailer condition indicated the company "did not have any physical retail stores." For the purpose of controlling participants' background knowledge of the retailer, we preferred to use a fictitious retailer name but tell participants the materials were from an actual retailer website. This meant that all participants would be making first-time purchases and have no previous knowledge or experience with the retailer by definition. However, it was possible that the use of a fictitious name might somehow inadvertently lead participants to view the seller as less tangible than a real retailer.⁴ Thus, a real brand condition was added to the design by using the name of an actual jewelry store located in a local mall, less than three miles from the University campus. The brand name of the real retailer was JC Jewelers; this retailer was chosen because it was likely to be unfamiliar to our participants. This controlled for any familiarity effects in that both real and fictitious stores should be unfamiliar. Also for control purposes, the fictitious retailer name was constructed by simply reversing the order of the two initials to CJ Jewelers. All other content remained constant across conditions. Note that we did not anticipate there would be any measureable differences between a fictitious brand that was said to be real and a real brand with which our participants were unlikely to be personally familiar, but we needed to confirm this empirically.

Dependent Measures. Participants used nine-point Likert scales to respond to each item (see Table 1), first completing a measure of purchase intentions related to the pair of earrings they most preferred (with origins in Zeithaml, Berry, and Parasuraman 1996), followed by a psychological distance measure related to the retailer. The measurement of psychological distance presented a particular challenge because there is no established scale suitable for use in a consumer-focused study. Consequently, we relied on Bar-Anan, Liberman, and Trope (2006), who examined a number of aspects of psychological

distance using an implicit association test for the construct. We adapted the implicit association test to a questionnaire measure by constructing four semantic differential items assessing tangibility (very tangible/very intangible), concreteness (very concrete/very abstract), hypotheticality (very real/very hypothetical) and perceived distance of the retailer (very near/very far). Participants also responded to four items from a trust scale with origins in Tax, Brown, and Chandrashekar (1998). Finally, measures of retailer quality (Sethi 2000), risk (Campbell and Goodstein 2001), and estimated firm size (i.e., number of employees) were assessed to examine these other viable mediators for the observed effects.

Results and Discussion

Preliminary Analyses. Nearly 91% of participants recalled the correct retailer condition and three participants did not follow instructions to choose one of the earring pairs. Those who failed either check were eliminated, leaving 85 participants to be analyzed.⁵ Cell sizes ranged from 23 to 35. The psychometric properties of the measures were assessed using confirmatory factor analysis (CFA). All scales were simultaneously tested, with each item allowed to load only on its respective factor. This model fit the data reasonably well ($\chi^2 = 246.19$; $df = 125$; CFI = .913; TLI = .894; SRMR = .069). All factors exhibited sufficient convergent and discriminant validity (Fornell and Larcker 1981). Construct reliabilities ranged from .81 to .97.

As mentioned above, we assumed that brand familiarity would be generally low and not differ across retailer conditions, consistent with our intention to examine psychological distance while controlling for well-known brand effects. Consistent with these assumptions, the grand mean of the familiarity scale was low ($M = 1.52$) and ANOVA revealed no effect of retailer condition ($p > .4$). Moreover, 93% of respondents indicated not having heard of the retailer, which did not differ by retailer condition ($\chi^2 = 1.71$, $df = 2$).

Testing H1. As expected, MANOVA results revealed overall effects of the Retailer condition on our outcomes ($F_{(6,160)} = 4.55$, $p < .001$, Wilk's $\Lambda = .73$). Follow-up ANOVAs of psychological distance, trust, and purchase intentions each showed Retailer effects [$F_{(2,82)} = 12.69$, 9.53, $ps < .001$; and 3.01, $p = .055$]. Planned orthogonal contrasts were computed to isolate the effects of a tangible physical store and whether the hybrid retailer was fictitious or not (see Table 2). The tangible store contrast revealed that, compared to the virtual only retailer, hybrid retailers were perceived to be less psychologically distant ($M_{real_local} = 4.58$, $M_{fictitious_local} = 4.78$ vs. $M_{virtual} = 6.60$, $ps < .001$), more trusted ($M_{real_local} = 5.83$, $M_{fictitious_local} = 4.99$ vs. $M_{virtual} = 3.68$, $ps < .01$), and have higher purchase intentions ($M_{real_local} = 5.22$, $M_{fictitious_local} = 4.99$ vs. $M_{virtual} = 4.03$, $p < .05$ and $= .064$). As expected, the hybrid name contrast further showed that the real versus fictitious hybrid did not significantly

⁵ Results of all three studies do not materially change when analyzing the entire sample of respondents, and therefore our results cannot be explained by differential subject loss across conditions.

⁴ We thank an anonymous JR reviewer for suggesting this possibility.

Table 1
Scale (source), construct reliabilities, and items.

Purchase intentions (Zeithaml, Berry, and Parasuraman 1996); CR = .93, .93, .92
 If I was purchasing [product], I would purchase from [retailer].
 If I was going to buy [product], I would consider buying from [retailer].
 If someone asked me, I would say that it was likely that I would buy [product] from [retailer].

Psychological distance; CR = .81, .89, .92
 When you think about [retailer] and its characteristics, how physically close are you to the company? [Very Close...Very Distant]
 When you think about the physical features of [retailer], how abstract are they in your mind Abstract = Difficult to Imagine | Concrete = Easy to Imagine [Very Concrete...Very Abstract].
 When you consider [retailer] and its features, how tangible are the attributes of the company in your mind? Tangibility is the extent to which you can sense (e.g., see, touch, hear, taste, or smell) the object of interest. [Very Tangible...Very Intangible].
 When you think about the physical features of [retailer], how real do they seem in your mind? [Very Real...Very Hypothetical].

Trust beliefs (Tax, Brown, and Chandrashekar 1998); CR = .97, .92, .97
 I believe that I could trust this retailer.
 I could depend on this retailer.
 I think this retailer would be reliable in meeting its promises.
 This retailer probably has high integrity.

Risk perceptions (Campbell and Goodstein 2001); CR = .91, –, .94
 Purchasing a [product] from [retailer] would be risky.
 There is a good chance of a problem if I purchased a [product] from the [retailer] website.
 I would be worried about being disappointed if I purchased the [product] from the [retailer] website.

Quality beliefs (Sethi 2000); CR = .91, –, .94
 Products sold by [retailer] are likely to be made well.
 Products sold by [retailer] will function as intended.
 Products sold by [retailer] are likely to have a long life.
 [Retailer] is likely to place emphasis on product quality.

Firm size
 Which of the following most likely characterizes [firm name]? [a one person operation, a small company with several employees, a medium size company, a large company]

Product knowledge (Lichtenstein, Netemeyer, and Burton 1990); CR = –, .97, –
 I have a lot of knowledge about how to select the best [product].
 If a friend asked me about [product], I could give them detailed advice about different options.
 If I had to buy a [product], I would have to gather a lot of information to make a wise decision.
 I am very confident in my ability to compare the technical features of [product].

Internet usage concerns (Korgaonkar and Wolin 1999); CR = –.84, –
 I worry about the security of making purchases online.
 I am concerned that my personal information will be shared without my consent.
 I am comfortable providing my credit card number on the Internet.

Note: CR (construct reliability) is listed for each study in which the measure was included. All constructs, except firm size, are measured on nine-point scales. Of these, all are Likert-type, except psychological distance.

Table 2
Study 1 observed means (std. errors) and planned contrasts results.

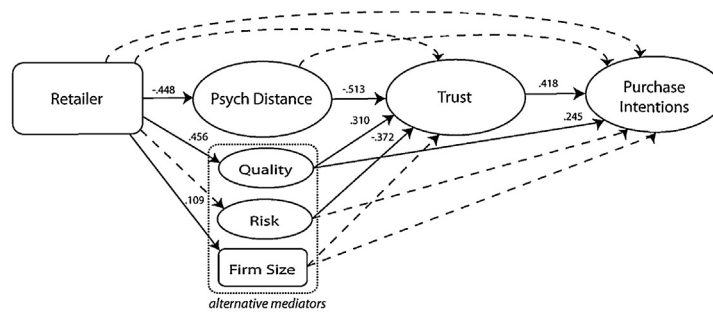
| Dependent variable | Real hybrid | Fictitious hybrid | Fictitious virtual | Physical store contrast | Hybrid store name contrast |
|--------------------------------|---------------|-------------------|--------------------|---------------------------|----------------------------|
| Psychological distance (PDist) | 4.58 (.36) | 4.78 (.33) | 6.60 (.29) | $t = -5.04$ $p < .001$ | $t < 1$ |
| Trust | 5.83 (.39) | 4.99 (.36) | 3.68 (.32) | $t = 4.15$ $p < .001$ | $t = 1.56$ $p > .12$ |
| Purchase intentions (PI) | 5.22 (.42) | 4.99 (.38) | 4.03 (.38) | $t = 2.44$ $p < .05$ | $t < 1$ |
| Contrast codes | | | | | |
| Physical store | 1 | 1 | -2 | | |
| Hybrid store name | 1 | -1 | 0 | | |

differ on any measure (all $ps > .12$). The results are therefore consistent with the predicted benefits of a tangible store in H1.

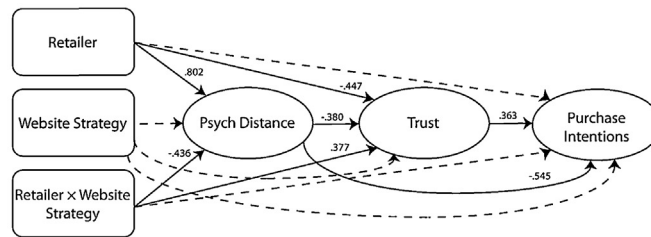
Mediation (H2). A structural equation model was estimated to test H2, our mediation hypothesis. Retailer conditions were coded -2 (virtual), and +1 (real and fictitious hybrids) based on the above results. We specified a model that allowed simultaneous tests of our mediation hypothesis alongside the other

possibilities that risk, quality, and firm size perceptions might also mediate the effects of our retailer manipulation on trust and purchase intentions (see Fig. 1, panel a). Although total and indirect effects of Retailer → PI were significant (all $ps < .01$), analysis revealed a nonsignificant Retailer → PI path ($p = .827$), suggesting full mediation by the combination of PDist, Quality, Risk, Trust, and Firm Size on PI. Note that estimation of a

a) tested simultaneously with alternative mediators (Study 1)³



b) tested with website strategy × retailer interaction (Study 2)⁴



c) tested with website strategy × retailer interaction (Study 3)

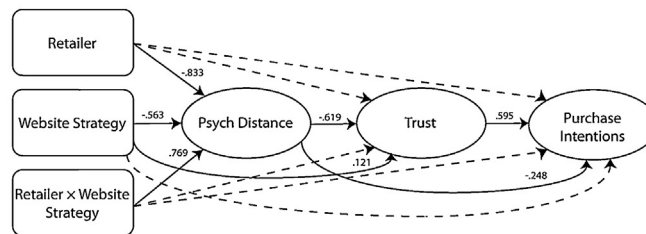


Fig. 1. Mediation of retailer on trust and purchase intentions by psychological distance. (a) tested simultaneously with alternative mediators (Study 1) (retailer → risk path was left in model in Study 1 to prevent risk from becoming exogenous). (b) Tested with website strategy × retailer interaction (Study 2) (website strategy → purchase intentions path in Study 2 caused the model to become misspecified). Follow-up regression analysis indicated a nonsignificant path. (c) Tested with website strategy × retailer interaction (Study 3). --- indicates effect not significant ($p > .10$) and path removed from final model; Standardized regression weights are reported.

simplified model that did not include Quality, Risk, and Firm Size showed a similar pattern for the meditational role of PDist and Trust alone. Most important here, the significant mediated path including psychological distance provides initial evidence for the unique effects of the predicted process in explaining the benefits a physical store has for trust and purchase intentions. These hybrid benefits also were a function of higher perceived firm quality, but not lower risk perceptions per se.

Summary. These results support the assertion that effects of psychological distance operate above and beyond those of quality, perceived risk, and firm size in explaining differences in online trust and purchase intentions. Responses to hybrid retailers were more positive due partly to the fact that the existence of a physical store shrunk the perceived psychological distance relative to a purely virtual retailer. Perceptions of retailer quality also were important in determining such judgments, but this process was distinct from the psychological distance mechanism. These initial findings further provided evidence for the reliability and validity of our newly constructed psychological distance

measure. Finally, as expected, there were no measureable differences between an unfamiliar real store and a fictitious store that was said to be real. The latter condition was therefore used in the remaining studies in order to fully control for brand familiarity effects. Overall, the additional evidence supports our CLT-based predictions that retailer tangibility in terms of the existence of a physical store should operate on consumer judgments of trust and purchase intentions at least partly through psychological distance.

Study 2: Effects of Physical Store, Physical Distance and Reducing Psychological Distance via Tangible Imagery

Study 2 was aimed at providing additional support for the tangible store prediction (H1), as well as testing CLT's prediction that the physical distance of the retail store should also have implications for psychological distance and downstream consequences. Specifically, the physical distance prediction was:

H3. In the context of a first encounter with unfamiliar retailers, as physical distance between a hybrid store and customer increases, (a) psychological distance will increase, and (b) trust, and (c) purchase intentions will decrease.

The effects of physical distance were examined by varying whether the hybrid store was said to be local versus 1,500 miles away. Note that inclusion of the 1,500-mile hybrid condition also allowed for a more stringent test of **H1**, which we refer to as the *mere presence effect*. Specifically, CLT suggests that a tangible physical store should still provide an advantage over a virtual retailer in terms of trust and purchase intentions, even if the physical distance of the store is too great to provide any realistic convenience or service benefit.

The other major goal here was to examine whether simple website design strategies could be used to compensate for a physically distant store or the lack of a physical store altogether, in order to compete more effectively with local hybrid firms. It is not generally practical for virtual or hybrid retailers, especially lesser-known retailers, to provide a network of local stores in numerous geographic locations. Thus, most retailers cannot be local to all consumers. Study 2 examines an alternative strategy that can be easily used to reduce psychological distance using images of an office building displayed on the company website. Despite a lack of retail outlets, even virtual retailers usually have some type of physical facility (e.g., a warehouse or an office). According to CLT, depictions of a tangible facility should lower perceptions of psychological distance. Moreover, past CLT research in other contexts suggests that multiple sources of psychological distance tend to have interactive effects on judgment (e.g., Kim, Zhang, and Li 2008; Zhao and Xie 2011). In the current context, the common currency principle suggests these interactions should take the form of compensatory effects for retailers that are otherwise the most psychologically distant (Maglio, Trope and Liberman 2013). That is, including a building image on a website should have the greatest compensatory effect on purely virtual retailers, less effect for physically distant hybrids, and even less for local hybrids. Accordingly, we predicted:

H4. In the context of first encounters with unfamiliar retailers, websites that depict physical facilities should (a) decrease psychological distance, (b) increase trust, and (c) increase purchase intentions, in comparison to websites that do not display such media; but these effects should be stronger for retailers that are otherwise more psychologically distant.

Finally, consistent with our theoretical model, the effects of a physical retail store, the physical distance of the store, and images of a physical building all were expected to impact trust and purchase intentions via psychological distance (**H2**). Note that in this case the research design involved a test of mediated moderation for the predicted psychological distance mechanism.

Procedure. Two hundred and sixty-two undergraduate business students participated in a 3 (Retailer: local vs. 1,500-miles away vs. virtual only) \times 2 (Website Strategy: absent vs. building picture) between subjects experiment. Respondents were randomly assigned to one of the six conditions upon visiting the

landing page of the online study and then were directed to a second webpage that presented the online purchase task. In this case, the task involved making a first-time purchase of a refurbished laptop computer from the website of a fictitious (i.e., unfamiliar) retailer named Sonic PC. Laptops were used here because: computers are one of the most popular items purchased online (Schonfeld 2010), they represent a high involvement/risk purchase where the consequences of deception would be more severe (Darke and Ritchie 2007), participants are relatively familiar with this product category, and refurbished products evoke the question of trust in the retailer (Benedicktus et al. 2010).

The instructions for the local condition indicated the company had “a physical retail store located in [the local city],” whereas the physically distant hybrid condition indicated a “physical retail store about 1,500 miles from [the local city].” The virtual retailer condition again noted the company “did not have any physical retail stores.” In addition, the building picture condition included a picture of a building on the website, whereas no building was shown in the picture absent condition. The building used was selected to appear as a general office building rather than a retail space. This was confirmed using a pretest ($N=42$), which showed that a larger proportion of respondents considered the image to be an office building (57.1%) or the headquarters for an Internet firm (61.9%) than a computer retail store (23.8%).

Participants were asked to review the retailer’s website, indicate their preference for one of five refurbished laptop computers, respond to dependent measures, and complete manipulation checks. The measures for psychological distance, trust, and purchase intentions from Study 1 were used again in Study 2. Finally, measures of knowledge of laptop computers (Lichtenstein, Netemeyer, and Burton 1990) and Internet purchase concerns (Korgaonkar and Wolin 1999) also were included as alternative process measures, but preliminary MANCOVAs showed these were not significant covariates, and therefore they are not further considered.

Results and Discussion

Preliminary Analyses. The measures were assessed as before; results suggested the measurement model offered good fit to the data ($\chi^2=194.92$; $df=125$; CFI=.98; TLI=.98; RMSEA=.05). The construct reliabilities (.84–.97) and convergent and discriminant validity of the scales were again adequate. Manipulation checks indicated that 80% of participants recalled the correct experimental condition. Participants who did not recall the correct condition were removed, leaving 209 cases suitable for analysis. Cell sizes ranged from 31 to 39.

Testing H1 and H3: Separating the Effects of a Physical Store and its Physical Distance. An initial one way MANOVA was computed only on the no-picture conditions in order to directly test **H1** and **H3**, which posit that psychological distance, trust, and purchase intentions are a joint function of both the presence of a physical store and its physical distance. This analysis revealed a significant effect of Retailer ($F_{(6,194)}=7.08$, $p<.001$, Wilk’s $\Lambda=.67$). Follow-up ANOVAs revealed effects on psychological distance, trust, and purchase intentions, respectively

Table 3
Study 2 observed means (std. errors) and planned contrasts results.

| Website strategy | Dependent variable | Local hybrid | 1,500 mi hybrid | Virtual only | Physical distance contrast | Physical store contrast |
|-------------------|--------------------|---------------|-----------------|---------------|----------------------------|---------------------------|
| No picture | PDist | 5.07 (.25) | 5.84 (.20) | 6.81 (.18) | $t = -2.59$ $p < .05$ | $t = -5.14$ $p < .001$ |
| | Trust | 5.40 (.29) | 4.61 (.26) | 3.45 (.24) | $t = 2.14$ $p < .05$ | $t = 4.76$ $p < .001$ |
| | PI | 5.01 (.22) | 4.27 (.13) | 3.26 (.20) | $t = 2.90$ $p < .01$ | $t = 5.90$ $p < .001$ |
| Building picture | PDist | 4.94 (.20) | 5.17 (.19) | 5.27 (.11) | $t < 1$ | $t < 1$ |
| | Trust | 5.69 (.22) | 5.35 (.20) | 5.17 (.24) | $t = 1.09$ $p > .27$ | $t = 1.33$ $p > .18$ |
| | PI | 5.08 (.36) | 4.88 (.27) | 4.73 (.31) | $t < 1$ | $t < 1$ |
| Contrast codes | | | | | | |
| Physical distance | | 1 | -1 | 0 | | |
| Physical store | | 1 | 1 | -2 | | |

PDist = psychological distance, PI = purchase intentions.

[$F_{S(2,99)} = 15.78, 13.03, 22.41, ps < .001$]. Planned orthogonal contrasts were then computed to separate the effects of a tangible physical store and the effects of its physical distance (for complete results, see Table 3). The physical store contrasts showed the virtual retailer was psychologically more distant ($M_{VR} = 6.81$), less trusted ($M_{VR} = 3.45$), and had lower purchase intentions ($M_{VR} = 3.26$) than the hybrid retailers (all $ps < .05$; consistent with H1). The physical distance contrasts further showed that the local hybrid condition was perceived as less psychologically distant ($M_{Local} = 5.07$ vs. $M_{1,500} = 5.84$), more trusted ($M_{Local} = 5.40$ vs. $M_{1,500} = 4.61$), and higher in purchase intentions ($M_{Local} = 5.01$ vs. $M_{1,500} = 4.27$) than the 1,500-mile hybrid condition (all $ps < .05$; consistent with H3). Finally, pairwise comparisons were computed between the 1,500-mile hybrid and virtual only conditions to directly test the mere presence prediction that a tangible store, even at a physical distance too great to be of practical benefit, would nonetheless provide measurable advantages over a purely virtual retailer. As predicted, the distant hybrid was perceived as less psychologically distant, more trusted, and had higher purchase intentions than the virtual retailer (all $ps < .01$; again supporting H1). Overall, these results replicate evidence for H1 and support H3, indicating that the existence of a tangible store and its physical distance have separate effects on perceptions of psychological distance, trust, and purchase intentions, as predicted by CLT.

Testing H4: Compensating for Lack of a Physical Store or its Physical Distance. Additional 3×2 MANOVAs revealed significant main effects of Retailer ($F_{(6,402)} = 4.54, p < .001$, Wilk's $\Lambda = .67$) and Website Strategy ($F_{(3,201)} = 7.60, p < .001$, Wilk's $\Lambda = .90$), qualified by a Retailer \times Website Strategy interaction ($F_{(6,402)} = 2.23, p < .05$, Wilk's $\Lambda = .94$). Follow-up ANOVAs revealed the same pattern on psychological distance, trust, and purchase intentions [$F_{S(2,203)} = 12.67, 12.90, \text{ and } 7.91; ps < .001$ for Retailer; $F_{S(1,203)} = 22.16, 21.91, \text{ and } 11.22, ps < .01$ for Website Strategy; $F_{S(2,203)} = 5.69, 4.48, \text{ and } 3.54, ps < .05$ for Retailer \times Website Strategy interaction.]. Pairwise analysis of the cell means shown in Table 3 suggest a common descriptive

pattern across measures; the office building images had the clearest effects on virtual retailers ($ps < .001$), followed by physically distant hybrids ($.01 < ps < .10$), and no significant effects on local hybrids ($ps > .63$). This pattern is consistent with the prediction that depiction of a tangible building image would most compensate retailers that were initially more psychologically distant (H4). In addition, while the physical store and physical distance contrasts reported above were significant for all dependent measures (all contrasts $ps < .05$ in the absence of a building picture), these tests became nonsignificant when the imagery of the office building was added to the website ($ps > .18$; see Table 3). This result implies building imagery minimized the advantages otherwise associated with a physical retail store and its physical proximity.

Mediation (H2). To test mediation, we specified a structural model that included the Retailer condition (Local Hybrid = -1; 1,500-mile Hybrid = 0; VR = +1), Pictures condition (No Pictures = 1; Pictures = 2), and their interaction (Retailer \times Imagery), see Fig. 1, panel b. Other coding methods for the Retailer condition (e.g., 1, 2 and 3) produced similar conclusions. The analysis process involved examining the direct and indirect effects of a three-level categorical exogenous variable (Retailer) on purchase intentions (PI) via psychological distance (PDist) and trust. The total and indirect effects of Retailer \rightarrow PI and Retailer \times Pictures \rightarrow PI were significant (all $ps < .01$), whereas the Retailer \rightarrow PI path was nonsignificant ($p = .516$), suggesting full mediation by PDist and Trust on PI. The primary concern of Study 2 was to examine the moderating effects of building pictures on the physical distance and physical store findings. Indeed, the total effect of the Retailer \times Picture interaction on PI ($\gamma = .442, p < .01$) was derived through partial mediation of PDist and Trust, where the interaction had a direct effect on Trust ($\gamma = .377, p < .01$) and only an indirect effect on PI ($\gamma = .435, p < .01$). The interaction also had an indirect effect on Trust ($\gamma = .166, p < .01$), indicating partial mediation of Retailer \times Pictures \rightarrow Trust by PDist. This analysis suggests that, in accordance with H2, the interaction between

the Retailer condition and building imagery on purchase intentions was mediated by perceptions of psychological distance and trust (i.e., mediated moderation).

Summary. Results of Study 2 provide further support for the general assertion that physical location is important for first-time online purchases from unfamiliar retailers in terms of its effects on psychological distance, trust, and purchase intentions. Specifically, two aspects of location were impactful: (1) the fact a physical store exists (i.e., tangibility), and (2) the physical distance of that store from customers. Of note, physically distant hybrids are preferred over virtual retailers even at a physical distance too great to be of much practical benefit, consistent with a mere presence effect. Mediation evidence again suggests psychological distance was a significant driver of trust and purchase intentions associated with different forms of multi-channel retailing. Finally, the findings were not explainable in terms of general concerns about making Internet purchases or product knowledge. Overall, this additional evidence supports CLT's assertion that tangibility (existence of a physical store) and physical distance should operate on consumer judgments of trust and purchase intentions through the common currency of psychological distance.

In addition, building images had substantive effects on consumer responses for virtual retailers, more moderate effects for non-local hybrids, and null effects for local hybrid retailers. H4 was therefore supported in that tangible building imagery was an effective strategy, but only when the firm did not already enjoy the benefit of proximity provided by a local physical store. The main practical implication of these results is that virtual and nonlocal retailers can improve consumer trust and purchase intentions without having to invest in local physical stores. The findings also provide further evidence for CLT's prediction that physical distance and tangibility are interchangeable due to their underlying common currency in terms of psychological distance; more specifically, increased tangibility conveyed by a building picture compensates for the psychological distance otherwise associated with a physically distant or purely virtual store. This conclusion was supported by a mediated moderation model. We now turn to Study 3 to test a second means by which perceptions of psychological distance could be altered according to CLT; namely by increasing social proximity.

Study 3: Reducing Psychological Distance via Social Proximity

Study 2 suggests that the increased tangibility of nonretail building images can compensate for the psychological distance otherwise associated with physically distant hybrid and virtual retailers. Study 3 examines whether social closeness, another facet of psychological distance, would have similar compensatory effects. Social closeness has been operationalized in many ways within the CLT literature (e.g., self vs. other, ingroup vs. outgroup, familiar-others vs. strangers, etc.; Stephan, Liberman, and Trope 2011). We chose to manipulate social closeness using familiarity with the business owner. This was inspired by the prominent use of Jeff Bezos as

the face of Amazon.com during the early days of Internet shopping when consumers were extremely reluctant to purchase online (Landrum 2004, p. 302). The manipulation used here was relatively subtle in that we simply provided information concerning the name and personal appearance of the business owner on the website, thereby minimally increasing familiarity with the owner. CLT's common currency principle suggests the social closeness associated with greater familiarity should compensate for retailers that are otherwise considered psychologically distant. In accordance with this reasoning, we predict:

H5. In the context of first encounters with unfamiliar retailers, websites that familiarize customers with the store owner (e.g., identity and appearance) should (a) decrease psychological distance, (b) increase trust, and (c) increase purchase intentions, in comparison to websites that do not include information about the owner; but these effects should be stronger for retailers that are otherwise more psychologically distant.

Procedure. Two-hundred and forty-four undergraduate business students participated in a 2 (Retailer: local hybrid vs. virtual only) \times 3 (Website Strategy: Control vs. Building Imagery vs. Owner Familiarity) between-subjects experiment. The 1,500-mile hybrid condition was excluded to simplify the design, and the virtual retailer was retained because it presented the biggest challenge in terms of psychological distance and its consequences. Respondents were randomly assigned to one of the six conditions and asked to shop online for a pair of diamond earrings for a loved one, as in Study 1. As before, the transaction was a first-time purchase from an unfamiliar vendor and the type of retailer was manipulated using the instructions, which indicated whether there was a local physical store or no physical store.

After reading the initial instructions, participants viewed the retailer's webpage showing the three similar pairs of diamond earrings used in Study 1. In the Building Picture conditions, an image of the same building used in Study 2 was shown on the webpage. In this case, a caption was added to further clarify that the jeweler's business office was located in the building. Alternatively, the webpage for the Owner Familiarity condition indicated the name (Kenneth Chase) and personal appearance of the owner (using a stock photo image). Specifically, the owner was depicted as a middle-aged man in a business suit working at a computer with his name and position (Owner) shown in a caption. A pretest exposed participants ($N = 169$ business students) to all versions of the jeweler webpage (control vs. building imagery vs. owner familiarity), and had them rate each version's social distance in terms of: how personally close they felt to the company (very distant, very close), how socially connected they felt to the company (very disconnected, very connected), whether they felt they knew something personal about the company (don't know personally, know personally), and how familiar they felt with the store (not at all familiar, very familiar; $\alpha s = .87-.92$). As expected, a repeated measures ANOVA revealed that the owner version was socially closer ($M = 5.27$) than either the control or building version ($M s = 3.98$ and 4.16 ,

$p < .001$). Finally, after reviewing the retailer's website, participants indicated their preference for the earrings and responded to the same dependent measures used in Study 1.

Results and Discussion

Preliminary Analyses. Measurement properties were assessed as before; results suggested the measurement model offered good fit to the data ($\chi^2 = 249.91$; $df = 125$; CFI = .96; TLI = .95; SRMR = .05), and that the construct reliabilities (.91–.97) and convergent and discriminant validity of the scales were adequate (Fornell and Larcker 1981). Only those who had correctly completed the manipulation checks were retained for the final analysis ($N = 193$, 79.1%). Cell sizes ranged from 28 to 38.

Main Analyses. MANOVAs on psychological distance, trust, and purchase intentions revealed main effects of the Retailer ($F_{(3,185)} = 7.43$, $p < .001$, Wilk's $\Lambda = .89$), and of Website Strategy ($F_{(6,370)} = 4.03$, $p < .01$, Wilk's $\Lambda = .88$), qualified by a Retailer \times Website Strategy interaction ($F_{(6,370)} = 2.27$, $p < .05$, Wilk's $\Lambda = .93$). Follow-up ANOVAs revealed the same pattern for psychological distance, trust, and purchase intentions, respectively [$F_{S(1,187)} = 22.42$, 6.29, and 5.66, $p < .05$ for Retailer; $F_{S(2,187)} = 10.48$, 7.92, and 5.48, $p < .01$ for Website Strategy; and $F_{S(2,187)} = 5.12$, 5.00, and 3.38, $p < .05$ for the Retailer \times Website Strategy interaction]. Pairwise comparisons of the cell means in the website control condition (see Table 4) again indicate the local retailer had an advantage over the virtual retailer on all three measures ($p < .01$), further supporting H1. Planned orthogonal contrasts that isolated the effects of tangible building imagery and social closeness (see Table 4) revealed that both website strategies significantly improved psychological proximity, trust, and purchase intentions for virtual retailers ($p < .01$), but not for local hybrids ($p > .3$). These findings support H4 and H5. Overall, both tangible building imagery and owner familiarity generally brought responses for virtual retailers more in line with the local hybrid condition ($p > .28$), although there was still a marginal difference remaining for the owner condition on psychological distance ($p < .10$).

Other Mediators. ANOVAs for the alternative mediators (quality, risk, and firm size) showed significant Retailer main effects [$F_{S(1,184)} = 13.19$, 11.04, $p < .001$, and $F = .48$, $p > .83$; for quality, risk, and size, respectively], similar to the results of Study 1. However, there were no significant Website-Strategy main effects [$F_{S(2,184)} = 1.34$, 2.45, and 1.47, $p > .08$], and most importantly no significant interactions [$F_{S(2,184)} = .35$, 2.02, and .66, $p > .13$]. Overall, these alternative mediators cannot explain the Retailer \times Website interaction observed for the marketing outcome measures (Baron and Kenny 1986), and therefore are not considered further.

Mediation (H2). To test mediation, we specified a structural model that included the Retailer (Local Hybrid = 2; Virtual = 1) and Website-Strategy conditions (Control = 1; Building = 2; Owner = 2), as well as their interaction (Retailer \times Website), as determinants of Psychological Distance, Trust, and Purchase Intentions, see Fig. 1, panel C. Although total and indirect effect

of Retailer \rightarrow PI and Retailer \times Strategy \rightarrow PI were significant (all $p < .05$), analysis revealed a nonsignificant Retailer \rightarrow PI direct path ($p = .33$). The total effect of Retailer on PI ($\gamma = .25$, $p < .05$) was derived through mediated paths where it had an indirect effect on Trust ($\gamma = .12$, $p < .05$) with full mediation by PDist ($p_{Retailer \rightarrow Trust} = .51$) and only an indirect effect on PI ($\gamma = .12$, $p < .05$). However, the primary concern of Study 3 was to examine the moderating effects of Building Imagery and Owner-Familiarity on PI via Trust, where the Retailer \times Strategy interaction had a direct effect on PDist ($\gamma = .77$, $p < .001$) and indirect effects on Trust and PI ($\gamma = -.53$, $-.52$, $p < .01$), consistent with the predicted mediated moderation.

Summary. The current results replicate both the finding that hybrid retailers are perceived as less psychologically distant (with its attendant effect on trust and purchase intention) relative to virtual retailers (H1), and that this difference in perception is limited when an image of a tangible office building is displayed on the website (H4). These findings also indicate that owner familiarity had compensatory effects that were similar to those of the tangible building strategy, in that greater familiarity primarily benefited virtual retailers that were otherwise psychologically distant (H5). This aspect of the findings further supports CLT's interchangeability hypothesis, in this case using a different facet of psychological distance (i.e., social distance). Moreover, mediational analyses confirmed that the joint effects of retailer-type and building/owner website strategies operated on trust and purchase intentions via psychological distance (supporting H2). Finally, while there were retailer effects on firm quality and perceived risk, there were no significant interactions that involved the website strategies, implying that these alternative mechanisms cannot explain the key interactions predicted by our CLT model. Practically, these results further reinforce the idea that virtual retailers can significantly improve consumer trust and purchase intentions without having to invest in physical stores.

One potential issue in interpreting the effects of the owner familiarity effects in this study is that, because this condition included a picture of the owner, it may have also increased the tangibility of the retailer. Although the findings would still be consistent with CLT in that case, it would be somewhat unclear whether familiarity per se is capable of compensating for psychological distance. However, an additional experiment that manipulated familiarity without the use of visual imagery showed similar benefits for psychological distance, trust, and purchase intentions. Specifically, we manipulated whether a distant hybrid retailer was said to be located in a familiar city (Aspen, CO or Niagara Falls, NY) or an unfamiliar city (Penrose, CO or Rexford, NY), where all the cities were located approximately 1,700 miles from participants. The results showed that a familiar location was effective in improving trust and purchase intentions via psychological distance relative to both a retailer in an unfamiliar location and a purely virtual retailer ($p < .001$). These findings confirm that familiarity per se can compensate for the negative effects of a physically distant store or the lack of a tangible store altogether, consistent with CLT's prediction that social closeness should have compensatory effects.

Table 4
Study 3 observed means (std. errors) and planned contrasts results.

| Retailer | Dependent variable | Control | Building picture | Owner familiarity | Building image contrast | Social closeness contrast |
|-------------------------|--------------------|---------------|------------------|-------------------|---------------------------|---------------------------|
| Local hybrid | PDist | 5.1 (.31) | 4.83 (.30) | 5.10 (.31) | $t < 1$ | $t = -1.02$ $p > .3$ |
| | Trust | 4.92 (.36) | 5.08 (.35) | 5.21 (.34) | $t < 1$ | $t < 1$ |
| | PI | 4.93 (.37) | 5.08 (.35) | 5.21 (.34) | $t < 1$ | $t < 1$ |
| Virtual only | PDist | 7.28 (.28) | 5.27 (.29) | 5.38 (.26) | $t = -4.93$ $p < .001$ | $t = -4.91$ $p < .001$ |
| | Trust | 3.00 (.33) | 4.98 (.34) | 5.18 (.31) | $t = 3.95$ $p < .001$ | $t = 4.58$ $p < .001$ |
| | PI | 3.23 (.33) | 5.03 (.35) | 4.96 (.32) | $t = 3.57$ $p < .01$ | $t = 3.59$ $p < .01$ |
| Contrast codes | | | | | | |
| Tangible building image | | -1 | 1 | 0 | | |
| Social closeness | | -1 | 0 | 1 | | |

PDist = psychological distance, PI = purchase intentions.

General Discussion

This research adds to the retailing literature by: (1) extending Construal Level Theory and the notion of psychological distance to provide a new framework for understanding the effects physical channel presence has on trust and marketing outcomes, and (2) using the CLT framework to identify ways in which physically distant, unfamiliar hybrids and virtual retailers can offset the disadvantages otherwise associated with such retail channels. Our research also has a number of theoretical implications for CLT itself. The main findings and their implications are detailed below.

The results demonstrated that, for first-time purchases from unfamiliar vendors, local retailers were perceived as less psychologically distant than their physically distant counterparts, which in turn were less psychologically distant than less tangible virtual retailers. Trust and purchase intention measures were generally consistent with, and mediated by, perceptions of psychological distance. There was also evidence for the *mere presence effect*, where simply communicating the existence of a retail location increased marketing outcomes over a virtual retailer, even though the physical distance was too great to be of any real service benefit (i.e., 1,500 miles). CLT accounts for this mere presence effect in terms of the ability of a tangible store to decrease psychological distance. Most importantly, all the studies provided evidence for one of the central theoretical assertions offered here; namely that the existence of a tangible retail location operates on consumer evaluations partly through psychological distance.

Studies 2 and 3 also further tested CLT's proposal that different facets of psychological distance should have interchangeable effects on judgment, and in particular that one facet could compensate for psychological distance on another. Specifically, these studies examined whether website strategies that made the company more tangible or socially closer would be effective in compensating for physical distance or the lack of a tangible store. Consistent with CLT, results showed that displaying a

picture of an office building (i.e., increased tangibility) or making customers familiar with the name and appearance of the business owner (i.e., creating social closeness) reduced psychological distance, and thereby increased trust and purchase intentions, for retailers that were otherwise psychologically distant. In fact, these strategies made unfamiliar distant hybrid and virtual retailers indistinguishable from unfamiliar local hybrids on our measures. The same strategies had little impact on local retailers because they were already perceived to be at lesser psychological distance.

We also investigated retailer quality, risk, consumer knowledge, and perceived size of the retailer as additional explanations for the retailer effects. Study 1 suggested that psychological distance and retailer quality independently mediated the differential perceptions of trust and purchase intentions for hybrids compared with purely virtual firms. Study 3 further showed that these variables could not explain the key Retailer \times Website interactions in that study. In contrast, these interactions and the observed mediated moderation by psychological distance were consistent with the predictions of CLT. Overall, while quality and risk perceptions played some role in marketing outcomes, these variables cannot explain the role that both tangible building imagery and owner familiarity (facets of psychological distance) played in determining the outcomes. Finally, measures of product knowledge proved not to be a significant covariate for trust or purchase intentions.

The current research suggests physical channel presence and the geographic distance of a retailer can play important roles in decision-making when consumers consider online purchases from unfamiliar retailers. As a general rule, consumers tend to favor less psychologically distant retailers. Firms that have an obvious physical presence in many locales are therefore likely to be preferred over retailers without a local physical presence. However, it is generally not feasible for many retailers, especially smaller retailers, to establish physical locations in close proximity to all consumers. Our research suggests more cost effective strategies that retailers operating at a physical distance

or that lack a retail store can use to circumvent the constraints of spatial distance and encourage consumers to purchase online. The specific strategies identified here include: (1) increasing tangibility (e.g., better informing consumers when a physical retail store exists, even if it is at great physical distance, and using website images of any other physical facilities), and (2) creating greater social proximity (e.g., familiarizing consumers with the owner's name and picture). Other strategies that increase the tangibility or social proximity of online retailers may provide similar benefits for purchase intentions by minimizing psychological distance.

Our research has a number of theoretical implications for CLT itself. For instance, our integration of the standard CLT model and the consumer trust literature concerning marketer stereotypes allowed us to extend the CLT framework to a new judgment context, namely to judgments of trust and purchase intentions in a multichannel environment. The predictions derived from our extension of CLT were supported in a number of different ways (e.g., mediation by psychological distance, interchangeability of different facets of psychological distance). This is the first research to make a theoretical link between psychological distance and consumer trust, and this link helps to better explain why consumers trust or distrust different forms of multichannel retailing.

Our research is also the first to identify the compensatory effects that different aspects of psychological distance can have on judgment. This seemed like the most obvious prediction given that changes on one facet of psychological distance are known to affect other facets, and different facets have similar effects on judgment when substituted for each other (Trope and Liberman 2010). While past research has shown significant interactions for the joint effects of different facets (Kim, Zhang, and Li 2008; Zhao and Xie 2011), the specific pattern of these interactions depends greatly on the particular judgment context (Zhao and Xie 2011), and the existing studies have not shown the compensatory effects observed here. Our research demonstrated this compensatory pattern in two separate ways, by showing that: (1) tangibility compensated for physical distance in Study 2, and (2) social proximity compensated for hypotheticality in Study 3.

Our studies have limitations that should be noted. For instance, our studies were conducted in the context of refurbished laptop computers and jewelry as retail categories. We selected these categories in part because we assumed that each would involve issues of consumers trust. In other product categories, where trust is less of a factor (e.g., highly standardized products), our effects may be less prominent. Furthermore, although we present evidence that perceived risk does not account for the key interactions in our studies, we nonetheless recognize that risk and trust are often related (Darke et al. 2012). Future work should further explore the roles of risk and other prominent purchase factors in online retail contexts.

Our studies also specifically focus on unfamiliar retail brands, because these retailers have great difficulty establishing trust online (Benedicktus et al. 2010), and often lack the resources to establish extensive networks of physical stores. Past research in the multichannel literature suggests that, whereas a physical retail location increases online trust and purchase intentions for

unbranded retailers, there is little benefit for branded retailers that are already familiar and highly trusted (Benedicktus et al. 2010). In fact, this finding is consistent with our CLT model in the sense that consumers are likely to perceive a familiar branded retailer as socially close, and therefore the added knowledge that the retailer also has a physical store is unlikely to have further impact on psychological distance given the familiar brand should already be psychologically proximal.

Finally, it should be noted that the protocol used in our studies begins with the consumer at the website, whereas getting customers to land on the website is itself a challenge for first-time purchases and unfamiliar retailers. Future research might profitably use our CLT framework to examine this question. For instance, receiving a referral concerning an unfamiliar retail website from a close friend (vs. an acquaintance) may be more likely to drive initial traffic to the website because of the social proximity involved. More broadly, the CLT framework has the potential to improve understanding of a wide range of factors that can potentially affect online trust and purchase intentions. For instance, other factors might be understood as essentially increasing the psychological proximity of the retailer via increased tangibility (e.g., website interactivity) or social proximity (e.g., avatars, made in America designation, or online chat). In addition, offering timely responses or expedited delivery to customers might reduce psychological distance by fostering temporal proximity. Other aspects of branding besides familiarity might also prove beneficial because they reduce psychological distance. For instance, some brand positioning strategies like Shane Co.'s "Your friend in the diamond business," or Allstate insurance's "You're in good hands," and brand characters like Toys-R-Us' Geoffrey the giraffe or Target's Spot the dog are likely to foster greater social proximity. We believe CLT offers less familiar online retailers a useful framework for conceiving of a broad range of strategies that might be used to increase consumer trust and purchase behavior online by reducing psychological distance.

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