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Psychological Distance Perceptions and Trust Beliefs for Internet Only and Hybrid Retailers: Implications for Marketers

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PSYCHOLOGICAL DISTANCE PERCEPTIONS AND TRUST BELIEFS FOR INTERNET-ONLY AND HYBRID RETAILERS: IMPLICATIONS FOR MARKETERS

By

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To my mother, for her constant interest and love;

To my father, for instilling discipline and determination;

To my father, who inspired a passion for business and a zeal for life;

To my son – every word I ever write will be for you.
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ABSTRACT

This dissertation introduces the concept of psychological distance to the Internet marketing literature and discusses the impact of physical retail presence on consumer perceptions of the firm. In particular, online retailer’s physical presence attributes are shown to be influential in reducing psychological distance and developing initial trust beliefs, which in turn have implications for consumers’ service inferences, satisfaction expectations, and purchase intentions.

Three studies empirically test the interplay between psychological distance theory and physical retail presence. Study 1 finds that online firms that also have a local retail store (local hybrids) are perceived to be less psychologically distant and more trusted than online firms with a non-local retail store, and that Internet-only retailers are more psychologically distant and less trusted than either local or non-local hybrid firms.

Study 2 replicated the effects identified in Study 1 and further demonstrated that media content conveying images of the firm’s tangible features (e.g., buildings and/or employees) can reduce psychological distance and enhance trust beliefs for Internet-only retailers and non-local hybrids, but that such media generally had null effects for an online firm with a local retail outlet. Thus, media content that stresses an online retailer’s physical presence appears to be an effective way to reduce psychological distance, increase trust, and promote competitive parity with retailers that do not have a local physical presence.

Study 3 holds geographic distance constant so that the non-spatial elements of psychological distance may be adequately tested. Study 3 finds that consumers’ familiarity with a retailer’s location reduces psychological distance and elicits higher trust beliefs and that retailers in familiar locations have marketing advantages over retailers in less familiar locations. Indeed, the effects of retailer location on the marketing outcomes were consistently in the opposite direction of the psychological distance results in all three studies.

Lastly, a mere presence effect was identified in the first two studies and further clarified in Study 3. This effect suggests that online retailers garner benefits by operating a retail location, even if it exists at a great distance from the consumer. However, the mere presence effect is not strong enough to level the playing field with online firms that have a local store, as local hybrids are less psychologically distant and retain greater trust than non-local hybrids. Study 3 clarifies this effect using unfamiliar locations at a great distance from consumers. Results suggest that
Overall, these studies add to the existing literature by showing that the existence and location of a physical retail store is an important consideration for online retailers in initial encounters when the consumer has little or no previous knowledge of the firm. Related research has shown that physical presence is important for building trust and increasing purchase intentions for unfamiliar retailers. This research extends such findings to include a broader set of marketing outcomes, demonstrating that physical store presence also affects service and problem responsiveness inferences, and satisfaction expectations. The research also adds geographic distance to the physical presence research framework and investigates factors that retailers can use to circumvent the general inhibiting effects of spatial distance, namely media emphasizing tangible features and a familiar retail location.

In addition to extending the consumer marketing literature, this dissertation has implications for managers. First, the unknown retailers that are likely to benefit from psychological distance-reducing strategies are conceivably not retailers with the financial capacity to invest in stores in every locale. Thus, these retailers should attempt to reduce psychological distance perceptions by emphasizing physical presence information. After emphasizing its presence in the physical environment, retailers are confronted with the inhibitor of geographic distance. The present research suggests that media highlighting physical retail facilities and employees can be used to attenuate this effect by increasing tangibility-based associations. Moreover, hybrid retailers should attempt to increase familiarity with their existing locations and then consider location familiarity among the criteria when expanding. The dissertation provides additional details related to these strategies as well as examples of retailers that have applied them in recent years.
CHAPTER 1
INTRODUCTION

Although extant research suggests many means by which competitiveness may be achieved on the Internet, recommended strategies are generally available to the same extent for all retailers. For example, Internet-only (IO) firms (i.e., companies selling products online, but having no physical outlets) and hybrid retailers (i.e., companies that have both Internet and physical distribution channels) can similarly manipulate prices, employ creative website design, make use of available interactive technologies, invest in third-party trust marks, manage publicly available customer feedback mechanisms, and even devise effective branding campaigns. The red queen effect (i.e., competitive mimicking) indicates that over time, the use of these strategies will become much more common in the online marketplace.

This phenomenon implies that differences across firms could become increasingly unclear when consumers compare retailers during online purchase encounters. However, the proximity of an online retailer’s offline location in terms of psychological distance (i.e., the perception of distance in the individual’s mind based on both spatial and psychosomatic factors) may be a key differentiator of online retailers. Specifically, a retailer’s location in physical space is less replicable than many of the strategies listed above. Further, consumers may have unique associations or a specific knowledge of certain locations that could transfer to their psychological distance perceptions and trust beliefs regarding the online retailer.

There is certainly anecdotal evidence for this assumption in the marketplace. For example, after several years of competition from Netflix, Blockbuster expanded its Blockbuster.com web-brand to regain market share from its video-by-mail rival. Soon after, Blockbuster touted its physical presence to consumers as its primary competitive advantage. Consumers were already familiar with the company from its offline operations and could take advantage of both channels in facilitating the receipt and returning of videos and games. Dell also recently attempted to increase access to customers by opening retail stores. Dell consumers could visit the store, learn about Dell products, and then purchase online. Ultimately, consumers’ inability to actually take home a product from Dell stores hindered growth (unlike the fully integrated Apple stores), but Dell is still experimenting with local channels, having added mall kiosks and contracted to distribute prefabricated computers in Wal-Mart stores. Wal-Mart has also integrated its channels to make its online brand more trusted. Consumers can now
purchase online from Wal-Mart.com and pick up their purchase within an hour at their local store, a similar process to one that Sears has had in place for years. Internet shoppers visiting these websites for the first time are likely to have greater trust and enhanced service perceptions for the retailers’ online operations due to their association of these firms with very specific physical attributes.

Indeed, one way that the Internet Crime Complaint Center (IC3) suggests online consumers can increase the chances of favorable purchase outcomes is by looking specifically for information indicating the presence of a physical location. A survey by IC3 showed that nearly 71% of online consumers checked for the presence of a physical storefront prior to making online purchases from unknown retailers (IC3 2003). Anecdotal evidence supporting physical channels as a source of enhanced trustworthiness beliefs and purchase intentions was recently substantiated by academic research. Benedicktus, Brady, Darke, and Voorhees (2008) demonstrate the importance of a local presence (maintaining a retail location in the customer’s city/town) in conveying trustworthiness online. The authors find that the effects of physical channel availability are qualified by customer ratings of the firm and strong brand familiarity, and that information related to the presence of a physical distribution channel can be used by less familiar retailers with low or no consensus information (i.e., customer feedback ratings) to convey trust at levels comparable to that of familiar brands. Given the well-documented, broad effects of brand familiarity in the online trust literature (Bart et al. 2005; Degeratu, Rangaswamy, and Wu 2000; Yoon 2002), an understanding of how unproven retailers can employ physical channel information is critical to improving their ability to compete with dominant brands in the online marketplace.

Until recently, the domain of psychological distance was limited to the cognitive geography, urban planning, international business, and personal relationship literatures. However, the construct could also hold broad application in the realm of consumer marketing. Indeed, a research niche has developed in the consumer psychology literature that addresses issues related to psychological distance (e.g., Bar-Anan, Liberman, and Trope 2006; Briggs 1973; Coshall 1985; Phipps 1979). These initiatives have been primarily focused on establishing theoretical foundations, developing measures, and examining consumers’ understanding of events. In contrast, this dissertation is the first known research effort to apply psychological distance in an online purchase context.
In order to aid in the development of this research stream, the present research examines several important questions. First, can the existence of an online retailer’s physical location affect consumers’ psychological distance perceptions? And if so, does information disclosing the physical location of a retailer affect online consumers similarly, regardless of geographic (spatial) distance? Alternatively, can distance from the customer’s physical location affect online trusting beliefs, service perceptions, and/or purchase intentions? In essence, can retailers match the consumers’ perceptions of local firms merely by operating a physical store somewhere, even if the store is at a great distance from consumers (mere presence)? In addition, what implications do offline retail locations have for online marketing outcomes? Specifically, can variance in trustworthiness beliefs, firm related inferences (e.g., service responsiveness, ability to resolve problems), satisfaction expectations, and purchase intentions be linked to offline retail location and be further explained by psychological distance?

Answers to the questions noted above hold important implications for managers. Specifically, if the mere presence of a physical store allows firms to generate perceptual benefits similar to that of local retailers, firms could realize substantial savings with respect to allocating resources to physical assets. Alternatively, if differences exist between retailers with stores at variant geographic distances from the customer, then additional strategies identified by this research can be used to close the psychological distance gap (i.e., increasing the tangibility and familiarity of a retailer’s location). This dissertation also investigates several factors that may mediate the relationship between retailer location, psychological distance, and trust, and likewise links trusting beliefs to service perceptions, pre-purchase satisfaction expectations, and purchase intentions. Overall, findings suggest that managers can raise service expectations by reducing psychological distance and developing trust. Finally, this research introduces several specific strategies for reducing psychological distance as it relates to retail store locations.

This research contributes to the literature in at least two ways. First, and most importantly, it provides a theoretical explanation and empirical evidence that support broad assumptions regarding differences between IO and hybrid firms. There is a well-developed consensus that consumers favor hybrids over IO firms, but until recently there has been little empirical evidence to support these notions. Furthermore, with the exception of frameworks that apply experience with, and adoption of the Internet as a purchase mediating technology (e.g., consumers do not buy from the Internet, it merely facilitates interactions – cf. Gefen 2000;
Holzwarth, Janiszewski and Neumann 2006), explanations for differences across online retailer types are either piecemeal (e.g., intangibility yields uncertainty; uncertainty negatively affects trust), or based largely on conjecture (e.g., service perceptions deteriorate because online consumers must wait for an order to arrive). In contrast, this work applies several theoretical frameworks to explain variations in trust across retail types. More specifically, Psychological Distance Theory, the Trust-Commitment Theory of relationship marketing, theoretical foundations supporting trust as a developmental process, and Protection Motivation Theory are used to establish early consumer knowledge as the basis for reducing psychological distance and to link retailer location characteristics to consumer perceptions and beliefs.

Second, the assumptions alluded to above are characterized as such due to a shortage of empirical evidence. This research transforms widely accepted academic statements into empirically supported arguments. Specifically, it presents results that distinguish Internet-only retailers from retailers with physical locations, and also compares retailers with variant geographic proximities to consumers from one another in terms of service perceptions, trusting beliefs, and purchase likelihood. These findings add to a growing body of work in the online services and online trust literatures by offering a specific path by which trust can be established online. This is the first study to apply the psychological distance concept to B2C relationships and the first to investigate trust in online retailers as a function of geographic and mental distance. Moreover, results demonstrate that psychological distance inhibits consumer trust on the Internet and that reducing psychological distance is a mechanism by which online retailers could enhance positive perceptions of service delivery, support assurances that consumer concerns and complaints will be addressed adequately, and amplify expectations that satisfaction is the most likely purchase outcome.

This dissertation is divided into four chapters. This first section outlines the need for an investigation of psychological distance in consumer marketing and provides a brief summary of the research results. Chapter Two presents a review of several streams of research. First, a multi-disciplinary view of psychological distance is presented. The trust literature is discussed and psychological distance is integrated into a relationship development framework with focus placed on development of the initial trust necessary for relationship inception. Protection Motivation Theory is used to suggest that firm-related characteristics, such as physical channel
information, are important considerations in early stages of relationship development. Hypotheses for the first of three studies are also stated in Chapter Two.

The third chapter presents the research design and results of the three studies. The first study demonstrates that psychological distance is reduced and online trust beliefs and consumer perceptions are enhanced when an Internet retailer also has an offline presence. The effect of offline channels is even more pronounced for Internet retailers with local stores. In Study 2, website media content that conveys the firm’s tangible attributes is established as a means by which IO retailers and non-local hybrids can reduce psychological distance and enhance trust to levels comparable to hybrid retailers that have a local presence. Study 3 applies cognitive geography concepts to validate the psychological distance mechanism in the earlier studies. In particular, the geographic distances of retailers’ locations are held constant so that the dependent measures can be linked exclusively to consumers’ familiarity with the retailers’ locations. Chapter Four provides further summary of the research, discussion of managerial and research implications, acknowledgement of research limitations, and future research directions.
CHAPTER 2
RESEARCH BACKGROUND

Psychological Distance

Psychological distance has been considered as a critical determinant of international marketing relationship success, is a principle factor in exporting decisions, and is considered to be important in consumers’ understanding of perceptual objects and events. Psychological distance theory also provides a framework for explaining phenomena in the formation of interpersonal relationships (i.e., distant versus geographically close relationships). Moreover, consumer psychologists have linked distance perceptions to social factors, such as familiarity with locations. This section reviews related theories of psychological distance and discusses findings related to each. As is often the case with multi-disciplinary constructs, the concept of psychological distance varies widely depending on the context in which it is applied.

In the international marketing literature, the Theory of Psychic Distance assumes that managers are less likely to commence business relationships with firms in locations perceived to be dissimilar than with firms in geographically and culturally similar countries (Stöttinger and Schlegelmich 1998). For example, U.S. managers might consider Australian and New Zealand markets to be more dissimilar than markets in Canada or the United Kingdom. In this context, psychological distance is defined as “the distance between the home market and a foreign market, resulting from the perception and understanding of cultural and business differences” (Evans and Bridson 2005, p. 70; with origins in Lee 1998, and Vahlne and Wiedersheim-Paul 1977). In these studies, the authors craft the term ‘psychological distance’ to refer to the perception of distance in the individual’s mind. For the purposes of this dissertation, the meaning of ‘distance’ is slightly expanded from these seminal works (i.e., the degree of separation between a home and foreign market) to refer to the degree of separation between the decision-maker and the location of a decision object (e.g., a market, firm, or event) in the consumers’ mind. This notion of distance follows Sykes (1987), referencing the distance between two points.

Nordström and Vahlne (1994) conceptualized psychological distance as a set of factors that inhibits communication and disrupts understanding of the attributes of unfamiliar environments. Psychological distance in this context is traditionally viewed as a composite factor relating to spatial distance (i.e., perceived distance based on geographic location), social
distance (based on self-conceptual and social differences), and trust (Hallen and Wiedersheim-Paul 1984; Hassel and Cunningham 2004; Holden and Burgess 1994). One of the core premises of this theory is that the success of relationships between distant parties is heavily dependent upon mutual trust (Swift 1999). This trust (and psychological closeness) grows through frequent interactions that facilitate the learning process (Ford 1989).

Welch and Luostarinen’s (1988) work on domestic and international exchange suggests that relationships over a greater spatial distance are characterized by greater psychological distance and higher uncertainty. Gatignon and Anderson (1988) uncover a similar trend of uncertainty with respect to socio-cultural distance. It is this uncertainty that prompts the desire to learn about the exchange partner. However, Kogut and Singh (1988) note that learning is often more rapid in psychologically proximal situations.

Therefore, large psychological distance can endanger the creation and/or continuity of relationships, whereas psychological proximity is generally believed to stimulate interactions and relationship continuity. More specifically, Conway and Swift (2000) find that a greater financial and psychological investment is required to establish and maintain more distant relationships. For example, cooperation between trading partners is suggested to decrease 42% when the distance between countries is doubled (Chang, Polachek, and Robst 2004). Results of Chang et al.’s study also suggest that net conflict grows as distance between trading partners increases. Moreover, Knowles (1980) estimates that discomfort with another party decreases at a rate of about the square root of the reduction in distance. Overall, these results suggest that psychological distance is an important factor in influencing relationship marketing strategy.

In the personal relationship literature, similar results have emerged. Specifically, long-distance dating relationships are typically burdened with more uncertainty than geographically close relationships (Lyndon, Pierce, and Regan 1997). Likewise, in leader-follower relationships, physical distance is thought to decrease opportunities for direct influence and thereby negatively affect working relationships (Liden et al. 1997; Napier and Ferris 1993). Extended physical distance also neutralizes relationship-oriented tasks whereas physical proximity between parties facilitates communication processes and enhances the quality of exchanges (Bass 1990; Kerr and Jermier 1978; Sparrowe and Liden 1997).

In close circumstances, there are typically more frequent opportunities to interact directly and achieve continuity. Conversely, more distant interactions tend to prohibit the sustainability
of relationships due to the relative absence of opportunities to engage in relationship development activities (Howell and Hall-Merenda 1999). For example, one of the primary factors affecting the emotional (or communicative) distance of inter-generational relationships is geographic proximity (Harwood and Lin 2000). Physical distance is also inversely related to the success of budding friendships (Hays 1985). Indeed, communication in long-distance relationships is generally more strained than in geographically close relationships (Stafford 2006). Alternatively, psychological closeness is associated with interpersonal warmth and openness (Andersen 1985; Beier and Sternberg 1977; Mehrabian 1971).

The consumer psychology literature has generated precise links between spatial and psychological distance, illustrating that geographic proximity can explain from 44% to 73% of the variance in cognitive distance (Briggs 1973; Coshall 1985; Phipps 1979). The social psychology literature also predicts that spatial and psychosomatic distance perceptions operate similarly (Bar-Anan, Liberman, and Trope 2006). Indeed, research has shown that psychological distance affects the quality of relationships in the areas of adaptation, commitment, cooperation, satisfaction, trust, and understanding (Leonidou, Barnes, and Talias 2006). Leonidou et al. (2006) suggests that relationship commitment is enhanced by familiarity with the trading partner’s social, cultural, and other characteristics, and that satisfaction is more pronounced in close rather than distant relationships.

Similarly, psychological proximity is associated with mutual adaptation, low conflict, higher commitment, and greater relationship satisfaction (Katsikeas 1992; Katsikeas and Piercy 1990, 1993; Leonidou 1989). In essence, the more proximal the shared values of participants, the better conditions will be for trust to evolve (Roberts 2000). Thus, physical and mental distances result in greater psychological costs, which in turn affect partner selection and determine individual behaviors (Stöttinger and Schlegelmich 1998). These costs reduce individuals’ desires for relationships due to the additional effort required for continuity (Ford 1980). De Laat (2005) argues that trust can be created online via social cues, reputation, and third-party inputs. One such mechanism noted by De Laat is the appearance of a physical address at the end of an email message or forum posting. The author suggests that this information provides a cue that is interpreted by the reader as an offer of trust.

Distance cognition studies have shown that perceptions of distance are attenuated as familiarity with a location or entity intensifies (Lee 1962; Smith 1976; Potter 1976). Also,
consumers tend to underestimate distances to shopping locations that they use frequently, desire to visit, and with which they are emotionally involved (Meyer 1977; Pocock and Hudson 1978). Conversely, consumers tend to overestimate distances of stores that are not in their evoked sets (Coshall 1985). These findings support the view that as consumers engage in repetitive purchase behavior from a retailer, psychological distance and uncertainty is reduced. This research holds particular implications for psychological distance in online purchases. Specifically, it is likely that when purchasing from an online retailer for the first time, psychological distance will be quite high. As consumers purchase more frequently from the same websites, consumers’ perceptions of distance to the same retailer will be reduced. As a social bond is formed between the consumer and the firm, negative effects of spatial distance are likely to be mitigated.

This view is shared by Conway and Swift (2000) in their discussion of the role of psychological distance in the stages of relationship development. The researchers state that prior to contact, psychological distance is at a midpoint between low and high. In the initial contact stage, psychological distance increases substantially because this is the first point where the individual is making distance comparisons. Relationships are most likely to fail at this stage.

The initial contact is also the point at which psychological distance is likely to be the most apparent. As interactions occur, social information is exchanged and learning occurs (Goffman 1972). Over time, the relationship develops, mutual understanding and empathy are created, and psychological distance between the parties decreases. Once the relationship has matured, psychological distance should be minimized and a high incidence of trust should reinforce the relationship (Hallen and Wiedersheim-Paul 1984). Ultimately, trust in a target is determined by psychological proximity/distance (Conway and Swift 2000); however, as social interactions take place, a relationship will be developed and the effects of geographical dispersion will be expunged (Inglehart 1991).

**Trust**

A substantial quantity of the trust literature examines the trust construct from the perspective of relationship marketing (Doney and Cannon 1997; Dwyer, Schurr, and Oh 1987; Ganesan 1994). Trust has been identified as an important component of marketing relationships in many contexts, including consumers’ trust in salespersons (Doney and Cannon 1997; Morgan and Hunt 1994), service personnel (Halliday 2004; Coulter and Ligas 2004), advertisers (Pollay 1986; Darke and Ritchie 2007), information sources (Gotlieb and Sarel 1992; Harmon and
Coney 1982), websites (Bart, Shankar, Sultan, and Urban 2005; Yoon 2002), and brands
(Amblor 1997; Delgado-Ballester and Munuera-Alemán 2005). Overall, trust has emerged as a
critical determinant of purchase behavior, often mediating the path from antecedents such as
brand familiarity, perceived investment in advertising, privacy statements, presence of privacy
statements and security features, and third-party ratings to behavioral intentions (e.g., Jarvenpaa,
Tractinsky, and Vitale 2000; Schlosser, White, and Lloyd 2004; Yoon 2002).

Mayer, Davis, and Schoorman (1995, p. 712) define trust as “the willingness of a party to
be vulnerable to the actions of another party based on the expectation that the other will perform
a particular action important to the trustor.” Central to this definition is the vulnerability
component, which inherently suggests that the trustor may stand to lose something of value. In
this sense, trust is viewed as a willingness to rely on the exchange partner’s reliability and
integrity (Morgan and Hunt 1994) and a belief that actions of the trusted party will result in
positive outcomes for the trustor and avoid actions that would generate negative outcomes.

This perspective of trust reveals two fundamentally distinct constructs (McKnight,
Cummings, and Chervany 1998). A ‘willingness to rely’ refers to a trusting intention (Currell
and Judge 1995), whereas a trusting belief is more indicative of one’s perceptions of
competence, honesty, and benevolence of the firm (Mayer et al. 1995). In this context, intentions
reflect the behaviors referred to by Fishbein and Ajzen (1975), whereas the trusting beliefs
component is more consistent with the post-cognitive perceptions considered in the present
research (McKnight et al. 1998).

Consumer trust is heavily integrated with the relationship marketing and branding
literatures, both of which hold implications for the importance of a firm’s physical and social
presence. Thus, it is necessary to make one further distinction. Trust is often considered as a
core component of relationship quality and has also been considered as a determinant of brand
equity (Ambler 1997). The current work, however, is concerned primarily with the initial trust
beliefs that are thought to lay the foundation for successful relationships and further development
of brand trust associations.

McKnight et al. (1998) state that this initial trust is not based on prior experience or
firsthand knowledge of the firm’s performance, but is highly relevant in new encounters that
characteristically require greater cognitive processing of available cues. Past research also
indicates that trust develops over time and that an initial level of trust must be established prior
to the development of an ongoing relationship (McKnight, Choudhury, and Kacmar 2002; Stoecklin-Serino 2005). The relationship marketing literature has largely focused on developing and maintaining relationships, but relatively little attention has been placed on relationship inception. Research findings related to the means by which this initial trust is formed online are critical, yet remain limited relative to trust investigations involving existing relationships (e.g., Morgan and Hunt 1994).

Marketing Relationships: The Early Stages

Relationship marketing is traditionally conceptualized as “all marketing activities directed toward establishing, developing and maintaining successful relational exchanges” (Morgan and Hunt 1994, p. 22). Overall, successful marketing relationships allows for better cooperation, joint problem solving, reduced uncertainty, and less conflict between buyers and sellers. This approach to customer management yields higher loyalty and customer retention due to heightened levels of trust and commitment (Conway and Swift 2000; Morgan and Hunt 1994). Garbarino and Johnson (1999) apply the key mediating variable view originally proposed by Morgan and Hunt (1994) to demonstrate that for high relational customers, trust and commitment are the two primary constructs between component attitudes and future intentions. Moreover, in both of these works, trusting beliefs are modeled as a precursor to relationship commitment. Garbarino and Johnson (1999) also show trust to be an outcome of satisfaction. Other researchers have merged trust and commitment (Wang, Liang, and Wu 2006) or trust and satisfaction (Crosby, Evans, and Cowles 1990) into a single relationship quality construct due to common influences of consumer attitudes. Marketing relationships are developed over time and through the following stages (Dwyer et al. 1987; Levitt 1983):

1. Awareness – the buyer becomes conscious of the seller’s existence
2. Exploration – the buyer seeks out knowledge about the seller’s characteristics
3. Expansion – degree of interdependence increases
4. Commitment – mutual interest in an ongoing relationship develops
5. Dissolution – the relationship is terminated

In the early stages of relationship development, consumers become aware of a firm and search for information (Dwyer et al. 1987; Levitt 1983). The consumer’s primary goal at this point in the purchase process is to reduce uncertainty and develop confidence that the final
decision will be a good one. Relationship development is virtually impossible if the firm is not able to demonstrate trustworthiness in the initial encounters. Providing firm-related information to the customer in the awareness and exploration stages of the relationship is critical to trust development and relationship success because a lack of prior experience with an unknown retailer enhances the need for uncertainty reduction. Further, the more consumers learn about a firm, the more familiar and psychologically proximal the firm should become.

Protection-Motivation Theory (PMT) offers some insight into the process by which consumers appraise and cope with uncertainty. In particular, it outlines the reasons and process by which consumer seek trust cues in new purchase situations. PMT maintains that consumers are motivated to seek out such cues in order to protect themselves from unsatisfactory or harmful outcomes. Originally developed for application in patient decision-making (Rogers 1975), PMT was later extended to a more general theory of persuasive communication, emphasizing the cognitive processes on the route to behavior (Rogers 1983).

Protection-Motivation is best described as a two stage appraisal process in which individuals first assess the severity of, and their vulnerability to threats, and then complete a coping appraisal, in which potential threat-diminishing behaviors are evaluated (Boer and Seydel 1996). These appraisals result in intentions to respond adaptively (protection motivation) or undertake a maladaptive response (putting oneself at risk). Maladaptive responses include behaviors that lead to negative consequences (e.g., purchasing from an online retailer when evidence indicates it may not be trustworthy) and/or the absence of behaviors that may lead to such negative consequences (e.g., not searching for a more trustworthy retailer). PMT proposes that adaptive behavior depends on four factors, applied to purchase decisions as follows:

1) The perceived severity of a threat (i.e., how bad could the purchase outcome be?)
2) The perceived probability of the occurrence, or vulnerability (i.e., likelihood that the outcome would happen to the consumer)
3) The efficacy of the adaptive preventive behavior, or response effectiveness (i.e., would choosing another retailer be effective in preventing the bad outcome?)
4) The perceived self-efficacy of the individual (i.e., consumer’s confidence in own ability to undertake the adaptive behavior)

These four factors are assessed over the two-stage appraisal process. Specifically, threat appraisal is the estimation of severity and vulnerability, whereas coping appraisals involve
evaluation of the response effectiveness and the individual’s self-efficacy. PMT identifies two sources of information that contribute to the coping responses – 1) intrapersonal sources, consisting of personality variables (e.g., predisposition to trust) and prior experience, and 2) environmental sources, consisting of verbal persuasion (e.g., firm-to-consumer communication and word-of-mouth) and observational learning (i.e., the exploration and knowledge gathering stage of the relationship development process). These sources provide the basis for establishing of perceptions and beliefs in initial purchase encounters.

Rotter (1967) first identified a predisposition to trust as a personal characteristic that affected more specific trust judgments via a general tendency to trust others. Although this personality characteristic may impact a consumer’s trust in a given firm, it affects the consumer’s trust in all retailers similarly and thus is not a basis upon which a firm can differentiate itself from its competitors. Additionally, prior experience has an important influence on the weighting of attributes and also contributes to the relative impact of firm associations (Smith and Park 1992; Hoyer and Brown 1990), but research indicates that consumers at all levels of Internet experience share a common degree of concern when purchasing online (Penn, Doyle, and Sage 2005).

The present focus is on firm related knowledge that can be gained from environmental sources. Specifically, this dissertation concentrates on the observational learning component that is thought to shape consumers’ rudimentary knowledge and associations of retailers. Firm-related knowledge is a fundamental element in consumer decision-making (Alba Hutchinson, and Lynch 1991). Ultimately, knowledge of a retailer’s characteristics will affect the information recalled during an encounter with the firm (Keller 1993). Knowledge influences likelihood of firm consideration when the consumer is primed by the associated industry or product category and thus increases the relative position of a company in the consumer’s evoked set (Baker et al. 1986; Nedungadi 1990). Moreover, consumers form specific decision rules, such as only purchasing from well-known companies (Jacoby, Syzabillo, and Busato-Schach 1977). Thus, awareness of a specific firm characteristic can affect decision-making even if additional knowledge is limited. For example, using a decision rule, some consumers may only make Internet purchases from companies that also have a bricks-and-mortar store. Most consumers (71%) specifically seek this information while exploring the characteristics of online retailers (IC3 2003).
The goal of Internet retailers in the early stages of relationship development should be to form a node in the consumer’s memory, upon which specific associations can be attached. This node, commonly referred to as brand, contains the information that consumers collect via observational learning and the company’s marketing messages. Over time, consumers will integrate their purchase experiences and resulting attitudes into this node, at which time the preliminary attribute information is likely to become less salient. This phenomenon occurs because attitudes have more evaluative meaning and thus are more durable and accessible in memory than underlying attribute information (Chattopadhyay and Alba 1988). However, in early interactions, favorable knowledge-based associations are viewed as critical to competitive positioning, the building of customer-based brand equity, and ultimately increasing purchase likelihood (Keller 1993).

Past Research: Building Initial Trust on the Internet

There has been considerable interest in Internet trust building across multiple academic disciplines. Although marketing researchers have taken the lead in advancing this stream of research, the information systems and management literatures are also ripe with guidance for developing online trust. This section reviews significant findings with respect building initial trust on the Internet.

Since the advent of the Internet, a broad paradigm shift has changed popular opinion regarding the drivers of consumers’ online decision making. In the early days of the web, it was thought that even lesser known firms could compete with larger retailers for an unlimited market share. In addition, the rapid advancement of online auction sites and web intermediaries focused a great deal of attention on competitive pricing (Ba and Pavlou 2002; Reiley, Bryan, Prasad, and Reeves 2005) and website design (Egger 2001). Although consumers continue to search for savings on the Internet and both website functionality and aesthetics continue to be important, recent research has consistently demonstrated that trust is the sovereign driver of online purchase behavior (Gefen 2000; Reichheld and Schefter 2000; Urban, Sultan, and Qualls 2000). Moreover, well-known firms, particularly those with bricks-and-mortar stores, appear to have a distinct advantage over lesser-known retailers in exhibiting online trust (Benedicktus et al. 2008; Vara and Mangalindan 2006).

Urban, Sultan, and Qualls (2000) offer five keys to building online trust: (1) maximize the trust building cues on the website, (2) use virtual advisor technology, (3) provide unbiased
and complete information, (4) include competitive products, and (5) keep promises. Recent work has identified many trust building cues, including company awareness, brand strength, availability of advice, product availability, and absence of website errors (Bart et al. 2005; Kania 2001; Yoon 2002). Characteristics such as real world feel, user friendliness, product selection, information quality, and timeliness of firm responses have also been shown to enhance website credibility (Fogg et al. 2001; Shankar, Urban and Sultan 2002). In addition, Schlosser, White, and Lloyd (2006) find that perceived website investment can influence consumers’ trusting beliefs at variant levels of purchase risk.

Of course, some of these cues are more salient in consumer decisions than others. For example, Aiken and Boush (2006) find that outside certifications (e.g., Verisign, Better Business Bureau) serve as security cues and are more powerful trust signals than both perceived website investment and objective source ratings (e.g., Consumer Reports ratings). Alternatively, Bart et al. (2005) suggest that security statements are so common that their impact is reduced to insignificance because of the dominant effects of other factors. Belanger, Hiller, and Smith (2002) show that consumers value specific security features (i.e., SSL server connections) over seals or statements.

Consumers are increasingly concerned about on-time delivery and product availability (Bart, Shankar, Sultan, and Urban 2005), complaint recovery (Collier and Bienstock 2006; Holloway and Beatty 2003), product failures (Jarvenpaa et al. 2000), information privacy (Hoffmann, Novak, and Peralta 1999; Nöteberg, Christiaans, and Wallage 2003), and security (Farrell, Leung, and Farrell 2000). The impersonal nature of most Internet transactions and constraints on evaluating tangible product features intensify these fears. Therefore, it is imperative that managers communicate trustworthiness and an overall customer orientation. The initial trust that consumers develop in the website can be supported by customer rating websites such as bizrate.com and e-pinions.com. These sites provide information related to user-friendly web-design, on-time delivery, product selection, and overall assessments of firms’ propensity to meet consumer expectations. This type of customer feedback is instrumental in building trust for both well-known and unfamiliar Internet retailers (Benedicktus et al. 2008). These findings are consistent with earlier research illustrating that seller reputation and familiarity have a substantial impact on buyer trust (Anderson and Weitz 1989; Dasgupta 1988). Jarvenpaa et al. (2000) also show that the reputation of the selling firm influences the
creation of online trust and purchase intentions. More recent research has extended the benefits of reputation, suggesting that online firms with high consumer ratings can charge price premiums (Ba and Pavlou 2002; Reiley, Bryan, Prasad, and Reeves 2005).

Recent research has also suggested that online trust can be augmented with service enhancing technologies. Holzwarth, Janiszewski and Neumann (2006) did not examine trust specifically, but their research demonstrates that the likeability and perceived expertise of avatars (i.e., animated representations of individuals) can be manipulated to increase satisfaction with online retailers as well as increase purchase intentions. Qui and Benbasat (2005) identify a link between voice-enabled avatars and online trust, suggesting that the humanizing of online customer service personnel aids in developing trust. Although personal interaction on the Internet is still quite limited, many firms are also beginning to facilitate direct customer interactions by employing virtual help desks and chat sessions, which have been linked specifically to consumer trust (Qui and Benbasat 2005). Urban et al. (2000) also provide an example of a virtual advisor that features a product recommendation interface depicting an employee in the service environment.

Holzwarth et al. (2006) suggest that such efforts cause consumers to react to the website as a social entity because the website is exhibiting human-like behaviors. More specifically, Social Response to Communication Technologies theory argues that individuals have a tendency to respond to the technological devices that mediate interactions in the same way that individuals respond to other people (Reeves and Nass 1996). Morkes, Kermal, and Nass (1999) also find that technology users attribute human characteristics and develop an emotional relationship with computers despite knowing that computers do not have human motivations. As a result, technology users view these mediating technologies as social actors, as opposed to mere tools (Nass, Moon, and Carney 1999). Interestingly, Morkes et al. (1999) discover that when users participate in computer-mediated interactions, they exhibit much greater social response than when participating in human-computer interactions. In the context of Internet purchases, it follows that if consumers view the website as a facilitator of an interaction with another party, rather than interacting with the website itself, they are likely to respond to socially relevant trust cues in way that is more consistent with personal interactions.

A logical first step in shifting consumers’ view of Internet transactions from website purchases (i.e., “purchasing from the Internet”) to web-mediated service encounters (i.e.,
purchasing from firm with a website) is to convey tangibility enhancing trust cues to the customer. The most concrete of the available cues relate to the offline presence of the firm. Information related to the physical features of the firm has the unique ability to differentiate the retailer’s features from the mediating technology. Researchers have called for findings involving variables related to offline presence information (Bart et al. 2005). A preliminary effort was undertaken by Benedicktus et al. (2008), which identified local stores as more trusted than IO retailers. In general, hybrid firms are thought to be favored over IO companies due to their ability to transfer trust from bricks-and-mortar environments to the Internet (Epstein 2005; Melewar and Navalekar 2002).

A common argument for this phenomenon is that the online environment tends to eliminate cues that customers commonly use to assess the trustworthiness of a firm (Gefen 2000, 2002; Reichheld and Schefter 2000). For example, Doney and Cannon (1997) discuss personal interaction with salespersons as a key determinant of trust. However, person-to-person interactions are less frequent in e-commerce transactions than in physical encounters. In addition, transmitting tangible cues is a critical challenge for online retailers. Storefronts afford consumers the ability to examine products prior to the purchase decision. Although it may not always be possible for consumers to physically observe the product, they may infer greater transparency in product descriptions because other consumers are able to inspect the product in a physical store environment. Essentially, consumers may deduce a lower likelihood of misleading statements if the product is available for direct inspection.

A second reason that consumers may have greater trust in hybrid retailers is that investment in physical facilities may create a belief that the firm can be held accountable, thereby reducing uncertainty related to the firm’s intentions (Quelch and Klein 1996). This accountability represents a cost of engaging in opportunistic behavior, and from the consumer perspective it increases the likelihood that the firm will behave in a trustworthy fashion (i.e., development of calculative trust). Overall, communicating physical channel presence may be an effective trust-building strategy for multi-channel firms.

Although recent findings suggest that hybrid retailers with local stores are preferred over IO retailers, there is no available evidence regarding whether or not having a physical store beyond the local vicinity (a non-local hybrid) offers similar benefits to the firm. Operating a physical retail store at some location, even at a great distance from the customer, could assist
firms in establishing trust to a greater extent than Internet-only retailers (mere physical presence); however, this effect may not be strong enough to give non-local hybrids a level of trust comparable to local hybrid retailers.

The personal relationship literature predicts that people have greater trust in spatially close and socially proximal counterparts (Leonidou, Barnes, and Talias 2006), and much less effort is required to maintain these relationships (Conway and Swift 2000). In the context of the aforementioned theories and relationship development processes, it would be useful to determine whether physical channel information is capable of differentiating local hybrids, non-local hybrids, and IO firms via the mechanism of psychological distance.

**STUDY 1 RESEARCH HYPOTHESES**

The above discussion focused on relationship development, consumer learning, and trust building by means of reduced psychological distance. The multi-disciplinary psychological distance literature provides an ample foundation for comparing the psychological distance of local and non-local hybrid retailers. In particular, three literature streams consider geographic (spatial) distance a key component of psychological distance. Briggs (1973), Coshall (1985), and Phipps (1979) demonstrate a sizeable amount of shared variance between the two constructs. Furthermore, theoretical foundations and empirical findings in the international and interpersonal relationship literatures provide strong support for a link between spatial and psychological distance (Chang, Polachek, and Robst 2004; Conway and Swift 2000; Hallen and Wiedersheim-Paul 1984; Lyndon, Pierce, and Regan 1997; Welch and Luostarinen 1988). For these reasons, it is thought that hybrid retailers with more distant physical locations will exhibit greater psychological distance than hybrid firms with a local presence. In addition, IO retailers are typically construed to exist in a hypothetical space (i.e., from the consumer perspective, the website is the firm’s storefront, with which the consumer interacts). Geographic proximity is perceived in less abstract terms for retailers with more tangible attributes. For hybrid firms, websites represent a facilitator of the transaction between the firm and the customer, rather than a general embodiment of the firm itself. For these reasons it is proposed that:

- H1a: IO retailers are more psychologically distant than hybrid retailers, and
- H1b: Non-local hybrid retailers are more psychologically distant than local hybrid retailers.
Reducing uncertainty is critical to establishing trust (Moorman, Deshpandé, and Zaltman 1993). Psychological closeness has been shown to reduce uncertainty via better communication (Stafford, Merolla, and Castle 2006), warmth and openness (Andersen 1985; Beier and Sternberg 1977; Mehrabian 1971), and to facilitate establishment of relationships (Bass 1990; Kerr and Jermier 1978; Sparrowe and Liden 1997). Additionally, Dwyer et al. (1987) note that the buyer’s attraction to the seller can influence exploration of the seller’s attributes. It is widely thought that consumers are more attracted to hybrids than IO firms (Gefen 2000). It follows that consumers should seek to engage in relationships with hybrid retailers to a greater extent than with retailers that lack a physical channel presence. Trust is commonly accepted as a key component of relationship development. Physical channel information can provide consumers with an indicator of the retailer’s longevity or long-term orientation, a factor linked to consumer trust (Sharif, Kalafatis and Samouel 2005). Furthermore, spatial (geographic) distance represents a substantially large proportion of psychological distance (Coshall 1985). Overall, high levels of trust are generally present in less spatially distant relationships. Thus,

H2a: Consumers have more trust in hybrid retailers than IO retailers, and
H2b: Consumers have more trust in local hybrids than in non-local hybrid retailers.

The aforementioned theories suggest that if consumers perceive hybrid firms to be more psychologically proximal than IO retailers, and similarly perceive local retailers to be more psychologically proximal than non-local hybrids, they should also elicit a stronger desire to initiate a relationship with the respective firms (Conway and Swift 2000; Chang, Polachek, and Robst 2004; Knowles 1980). Consumers are thought to have a higher likelihood of purchasing from hybrid firms because a bricks-and-mortar storefront leads to a belief that the firm can be held accountable, thus reducing transaction uncertainty (Quelch and Klein 1996; Schoenbachler and Gordon 2002). Thus, the following hypotheses are proposed:

H3a: Consumers have greater purchase intentions for hybrids than for IO retailers.
H3b: Consumers have greater purchase intentions for local hybrids than from non-local hybrid retailers.

The mere opportunity for others to evaluate products in a physical environment may enhance consumers’ beliefs regarding the transparency of online product descriptions. Thus, consumers may deduce a lower likelihood of misleading statements from hybrid than IO retailers. Product descriptions are used in part to form purchase expectations as consumers
attempt to match their needs with available offerings. If consumers are more confident that a retailer is providing accurate information, they should also have greater confidence in their own ability to choose a seller that is capable of meeting their needs. Psychological distance theory also suggests that individuals will be more committed and more satisfied with geographically close partners (Katsikeas 1992; Katsikeas and Piercy 1990, 1993; Leonidou 1989). Similarly, greater spatial distances result in greater psychological costs of relationship engagement (Ford 1980; Stöttinger and Schlegelmich 1998). Such psychological costs are likely to reduce the potential for satisfying interactions. Furthermore, the higher trust in more proximal retailers should also be associated with a greater estimate of satisfaction probability. Thus, 

H4a: Consumers have greater pre-purchase satisfaction expectations from hybrid retailers than from IO retailers.

H4b: Consumers have greater pre-purchase satisfaction expectations from local hybrids than from non-local hybrid retailers.

From a theoretical perspective, geographic distance is viewed as a potential inhibitor of communication flow (Bello and Gilliland 1997). Furthermore, distance in relationships is associated with low levels of mutual communication and greater communication avoidance, withdrawal, and conflict (Christensen and Shenk 1991). Moreover, from a consumer perspective, perceived responsiveness to potential problems may be increased when customers have the option of returning their purchases to a physical store. Specifically, firms with a physical store also offer the opportunity to address complaints in person - a method that consumers believe maximizes the chances of a favorable secondary outcome (Quelch and Klein 1996). From a managerial perspective, physical presence information can serve as a signal of reliability and service quality. Bricks-and-mortar firms can apply a vast array of retailing knowledge to improve customer service on the Internet (Hughes, Golden, and Scott 2002). Thus, it is proposed that:

H5a/b: Consumers perceive hybrid retailers to be more responsive than IO retailers (a) during normal service encounters, and (b) in the case of problem resolution.

H5c/d: Consumers perceive local hybrids to be more responsive than non-local hybrid retailers (c) during service encounters, and (d) in the case of problem resolution.

If consumers demonstrate higher trust, expect a greater probability of satisfactory outcomes, and have greater perceived responsiveness for hybrid and local retailers as described
above, then it follows that psychological distance may be the first mediator of the path from retailer location to purchase intentions. Further, the marketing literature has linked each of these factors to purchase behavior (Schlosser et al. 2006; Smith and Barclay 1997; Tax et al. 1998). Trust and satisfaction have also been identified as mediators of the path to purchase intentions in previous research (Cronin, Brady, and Hult 2000; Jarvenpaa et al. 2000). Additionally, consistent satisfactory experiences, excellence in service delivery, and equitable complaint management are all associated with high consumer trust (Smith and Barclay 1997; Tax, Brown, and Chandrashekaran 1998; Sirdeshmukh, Singh, and Sabol 2002). It is expected that similar results will be identified in this research. Overall, the literature suggests that the following mediating relationships are likely to exist, resulting in the Research Model shown in Figure 2.1.

H6: (a) Trust, (b) Responsiveness, and (c) Expected Satisfaction will mediate the effect of Retailer Location on Purchase Intentions;
H7: (a) Trust and (b) Responsiveness will mediate the effects of Retailer Location on Expected Satisfaction; and
H8: Psychological distance will mediate the effects of Retailer Location on (a) Trust, (b) Responsiveness, and (c) Expected Satisfaction.

Figure 2.1: Study 1 Research Model
CHAPTER 3:
RESEARCH METHODS AND RESULTS

STUDY 1: EFFECTS OF PHYSICAL STORE LOCATION

Method

Subjects and Design. Hypotheses were tested using a between subjects design with four experimental conditions (Retailer location: local, 500 miles away, 1500 miles away, and Internet only). The dependent measures were psychological distance, consumer trust in the retailer (benevolence and reliability measures), perceived service responsiveness and responsiveness to problems, expected satisfaction, and purchase intentions. Two hundred forty-seven undergraduate business students were recruited to participate in the experiment and given extra credit for their participation. The respondents participated in the study by visiting a website at which they were randomly assigned to one of the four conditions.

Procedure. Following random assignment, subjects were forwarded to a webpage that presented a brief purchase scenario and presented the location information. This scenario asked participants to consider the purchase of a refurbished laptop computer. Refurbished laptops was selected as the product category because computers generally have a large number of features to evaluate and often require post-purchase support. Participants were asked to review a retailer’s website, evaluate five laptop computers, indicate their laptop choice, and proceed to the study.

Participants in the local condition were told that the company had “a physical retail store located in” [the respondents’ city]. The non-local hybrid manipulations indicated the company had a “physical retail store about [500/1,500] miles from” [the respondents’ city]. These distances were chosen because 500 miles is far enough not to be confused with the local vicinity and is within one day’s driving distance, and 1,500 miles is generally too far to travel merely to visit a store. Distances were disclosed to respondents rather than city names because associations with cities were a possible confound of the geographic distance manipulation. Participants in the IO condition were told that the company did “not have any physical retail stores.” All other content remained constant across conditions. After reading the scenario, participants reviewed product information on the retailer’s website and responded to a series of scaled response questions. The scenario and homepage are shown in Figure 3.1.
Laptop Computer Purchase Scenario

Please imagine that you are purchasing a laptop computer from a retailer on the Internet. To save money, you have decided that a refurbished laptop would best suit your budget. While searching for the best deal, you visit several websites and find a company that sells refurbished laptops.

You also discover that this company has a physical retail store located about 1500 miles from Tallahassee, FL.

Using what you know about this retailer, evaluate the products on the retailer’s website below and decide which of the laptop computers that you would prefer. After selecting the laptop of your choice, please submit your choice and proceed to a short survey. Thank you again for your participation.

Figure 3.1: Study 1 Manipulation – Hybrid Retailer @ 1500 miles
Dependent Measures. Factors were measured using nine-point multiple-item Likert scales as shown in Table 3.1. Respondents first indicated their purchase intentions on a scale with origins in Zeithaml, Berry, and Parasuraman (1996). Next, respondents indicated their perceptions of distance on semantic differential items similar to those used by Bar-Anan et al. (2006). This scale is currently the only empirical measure of psychological distance in the psychology literature that can be readily applied to consumer research. These items asked respondents to consider the characteristics of the retailer and indicate the extent to which the retailer was proximal versus distant, and abstract versus concrete. A subset of items from a multi-dimensional trust scale developed by Delgado-Ballester (2004) was used to provide a comprehensive assessment of the trust construct. Three items assessed perceived benevolence (e.g., “This retailer is will keep my best interests in mind.”), and four items measured reliability (e.g., “This seller is very dependable,” and “This seller will keep its promises”).

Three items from Shiv and Huber (2000) were adapted to capture pre-purchase satisfaction expectations (e.g., “The retailer would probably meet my expectations”). Perceived responsiveness was measured with five items (e.g., “The retailer would be responsive to my needs”) with origins in Carman (1990). Four items used by Delgado-Ballester (2004) assessed respondents’ anticipated response to potential problems (e.g., “The retailer would address my concerns if I was not satisfied”). In addition, four items with origins in Lichtenstein, Netemeyer, and Burton (1990) and Smith and Park (1992) measured consumer’s knowledge of laptops computers and three items adopted from Korgaonkar and Wolin (1999) assessed consumer’s Internet usage concerns. Product class knowledge and Internet concern were considered as covariates in the ANOVA models; however neither had a significant effect on the results.

Preliminary Analyses. The psychometric properties of the measures were assessed using confirmatory factor analysis (CFA). All scales were simultaneously tested, with each item being allowed to load on only its respective factor. The results of the CFA, shown in Table 3.2, suggest that the measurement model offered good fit to the data ($\chi^2 = 813.5$; $df = 398$; $CFI = .98$; $NNFI = .97$; $RMSEA = .07$). Moreover, all variables exhibited sufficient construct reliability, convergent validity, and discriminant validity based on Fornell and Larcker’s (1981) criteria. Construct reliabilities ranged from .82 to .96. Manipulation checks indicated that approximately 84.1% of subjects correctly recalled the correct experimental condition, leaving 176 cases suitable for analysis. Cell sizes for the groups ranged from 35 to 54.
### Table 3.1: Items Used and Sources of Scales

<table>
<thead>
<tr>
<th>Source of Scales</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purchase Intentions (Zeithaml, Berry, and Parasuraman 1996)</strong></td>
<td>I would purchase a refurbished laptop from this retailer.</td>
</tr>
<tr>
<td></td>
<td>If I was going to buy a refurbished laptop, I would consider this retailer.</td>
</tr>
<tr>
<td></td>
<td>If someone asked me, I would say that it was likely that I would buy a laptop from this retailer.</td>
</tr>
<tr>
<td><strong>Psychological Distance (Bar-Anan, Liberman, and Trope 2006)</strong></td>
<td>How distant is this retailer from you? Very Near... Very Far (Study 1, Study 2, and Study 3)</td>
</tr>
<tr>
<td></td>
<td>The physical features of this firm are [Very Concrete…Very Abstract] to me. (Study 1 only)</td>
</tr>
<tr>
<td></td>
<td>When I think of this retailer its physical features are [Very Vague... Very Apparent], (Study 2 and Study 3)</td>
</tr>
<tr>
<td></td>
<td>In my mind, the physical features of this retailer are [Very Intangible…Very Intangible], (Study 2 and Study 3)</td>
</tr>
<tr>
<td></td>
<td>This retailer’s location is [Very Hypothetical…Very Real] to me (Study 2 and Study 3)</td>
</tr>
<tr>
<td><strong>Trust – Reliability (Delgado-Ballester 2004)</strong></td>
<td>I believe that I could trust this retailer.</td>
</tr>
<tr>
<td></td>
<td>I could depend on this retailer.</td>
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<tr>
<td></td>
<td>I think this retailer would be reliable in meeting its promises.</td>
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<tr>
<td></td>
<td>This retailer probably has high integrity.</td>
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<tr>
<td><strong>Trust – Benevolence (Delgado-Ballester 2004)</strong></td>
<td>This retailer has my best interests in mind.</td>
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<tr>
<td></td>
<td>This retailer would consider my welfare as well as its own.</td>
</tr>
<tr>
<td></td>
<td>This retailer would be honest and sincere.</td>
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<tr>
<td><strong>Expected Satisfaction (Shiv and Huber 2000)</strong></td>
<td>This retailer would probably meet my expectations.</td>
</tr>
<tr>
<td></td>
<td>This retailer would not disappoint me.</td>
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<tr>
<td></td>
<td>This retailer would guarantee my satisfaction.</td>
</tr>
<tr>
<td><strong>Service Responsiveness (Carman 1990)</strong></td>
<td>This retailer would likely give me prompt service.</td>
</tr>
<tr>
<td></td>
<td>This retailer would likely offer timely delivery.</td>
</tr>
<tr>
<td></td>
<td>This retailer would respond to my requests quickly.</td>
</tr>
<tr>
<td></td>
<td>Overall, this retailer would be responsive to my needs.</td>
</tr>
<tr>
<td></td>
<td>The retailer would probably answer my questions quickly.</td>
</tr>
<tr>
<td><strong>Response to Problems (Delgado-Ballester 2004)</strong></td>
<td>If a problem occurred with this sale, I am confident that the retailer would make it right.</td>
</tr>
<tr>
<td></td>
<td>This retailer would handle any complaints that I might have.</td>
</tr>
<tr>
<td></td>
<td>This retailer would address my concerns if I was not satisfied.</td>
</tr>
<tr>
<td></td>
<td>The retailer would address any problems that I had during the transaction.</td>
</tr>
<tr>
<td><strong>Product Class Knowledge (Lichtenstein, Netemeyer, and Burton 1990)</strong></td>
<td>I have a lot of knowledge about how to select the best laptop computer.</td>
</tr>
<tr>
<td></td>
<td>If a friend asked me about laptop computers, I could give them detailed advice about different options.</td>
</tr>
<tr>
<td></td>
<td>If I had to buy a laptop today, I would have to gather a lot of information to make a wise decision.</td>
</tr>
<tr>
<td></td>
<td>I am very confident in my ability to compare the technical features of laptop computers.</td>
</tr>
<tr>
<td><strong>Internet Usage Concerns (Koranonkar and Wolin 1999)</strong></td>
<td>I worry about the security of making purchases online.</td>
</tr>
<tr>
<td></td>
<td>I am concerned that when I make a purchase online, my personal information will be shared without my consent.</td>
</tr>
<tr>
<td></td>
<td>I am comfortable providing my credit card number on the Internet.</td>
</tr>
</tbody>
</table>
Table 3.2:
Study 1 Construct Reliabilities (c.r.), Average Variances Extracted (Diagonal), and Shared Variances

<table>
<thead>
<tr>
<th></th>
<th>c.r.</th>
<th>PD REL</th>
<th>BEN</th>
<th>SR</th>
<th>PR</th>
<th>ES</th>
<th>PI</th>
<th>PK</th>
<th>IC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Distance</td>
<td>.87</td>
<td>.775</td>
<td>.96</td>
<td>.288</td>
<td>.862</td>
<td>.92</td>
<td>.125</td>
<td>.581</td>
<td>.790</td>
</tr>
<tr>
<td>Trust - Reliability</td>
<td>.96</td>
<td>.288</td>
<td>.862</td>
<td>.862</td>
<td>.378</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust – Benevolence</td>
<td>.92</td>
<td>.125</td>
<td>.581</td>
<td>.790</td>
<td>.777</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Responsiveness</td>
<td>.95</td>
<td>.207</td>
<td>.534</td>
<td>.599</td>
<td>.777</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Responsiveness</td>
<td>.95</td>
<td>.236</td>
<td>.599</td>
<td>.725</td>
<td>.760</td>
<td>.827</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expected Satisfaction</td>
<td>.88</td>
<td>.258</td>
<td>.749</td>
<td>.783</td>
<td>.638</td>
<td>.734</td>
<td>.786</td>
<td></td>
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<tr>
<td>Purchase Intentions</td>
<td>.96</td>
<td>.163</td>
<td>.471</td>
<td>.332</td>
<td>.399</td>
<td>.405</td>
<td>.900</td>
<td></td>
<td></td>
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<tr>
<td>Product Knowledge</td>
<td>.94</td>
<td>.026</td>
<td>.007</td>
<td>.021</td>
<td>.011</td>
<td>.016</td>
<td>.004</td>
<td>.023</td>
<td>.791</td>
</tr>
<tr>
<td>Internet Concern</td>
<td>.82</td>
<td>.066</td>
<td>.000</td>
<td>.001</td>
<td>.000</td>
<td>.001</td>
<td>.000</td>
<td>.002</td>
<td>.611</td>
</tr>
</tbody>
</table>

Results

ANOVA results are presented in Table 3.3. Results indicate significant effects of retailers’ location on psychological distance [$F(3,167) = 9.74, p < .001, \eta^2 = .149]$. LSD comparisons indicate support for hypothesis 1a; IO retailers ($M = 5.13$) are more psychologically distant than retailers with local stores ($M = 3.76$) and stores that are 500 ($M = 4.40$) and 1500 ($M = 4.41$) miles away (all $p < .01$). Comparisons also revealed differences across local hybrids and non-local hybrid groups. Non-local hybrids ($M_{500} = 4.40$ and $M_{1500} = 4.41$) are more psychologically distant than local hybrid stores ($M = 3.76, p < .05$), supporting H1b, and are also less psychologically distal than IO retailers ($p < .05$). This shows that the mere presence of a physical store can reduce psychological distance; however the effect is not strong enough in this case to reduce psychological distance to the same level as local hybrid retailers.

Table 3.3: Study 1 Effects of Retailer Location and Resulting Means (Std. Error)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>F (partial (\eta^2))</th>
<th>Local (Std. Error)</th>
<th>500 mi. (Std. Error)</th>
<th>1500 mi. (Std. Error)</th>
<th>Internet-Only (Std. Error)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Distance</td>
<td>9.74 (.15)</td>
<td>3.76 (.199)</td>
<td>4.40 (.166)</td>
<td>4.41 (.199)</td>
<td>5.13 (.164)</td>
</tr>
<tr>
<td>Reliability Beliefs</td>
<td>5.89 (.10)</td>
<td>5.77 (.241)</td>
<td>5.06 (.198)</td>
<td>5.07 (.244)</td>
<td>4.45 (.202)</td>
</tr>
<tr>
<td>Benevolence Beliefs</td>
<td>3.59 (.06)</td>
<td>5.16 (.224)</td>
<td>5.11 (.185)</td>
<td>5.22 (.228)</td>
<td>4.43 (.189)</td>
</tr>
<tr>
<td>Service Responsiveness</td>
<td>7.23 (.11)</td>
<td>6.37 (.203)</td>
<td>5.67 (.166)</td>
<td>5.68 (.206)</td>
<td>5.13 (.171)</td>
</tr>
<tr>
<td>Problem Responsiveness</td>
<td>7.20 (.12)</td>
<td>5.70 (.222)</td>
<td>5.01 (.181)</td>
<td>5.00 (.225)</td>
<td>4.36 (.186)</td>
</tr>
<tr>
<td>Satisfaction Expectation</td>
<td>9.28 (.14)</td>
<td>5.86 (.207)</td>
<td>5.11 (.170)</td>
<td>5.15 (.210)</td>
<td>4.44 (.174)</td>
</tr>
<tr>
<td>Purchase Intentions</td>
<td>9.01 (.13)</td>
<td>6.00 (.195)</td>
<td>5.29 (.160)</td>
<td>5.30 (.198)</td>
<td>4.67 (.164)</td>
</tr>
</tbody>
</table>

Note: \(\eta^2 = \text{partial eta square}

\(a \leq .001, b \leq .01, c \leq .05\)
As expected, there was also strong support for a relationship between retailer location and the reliability and benevolence dimensions of trust \[ F_{s (3,171)} = 5.84 \text{ and } 3.59, \ p < .05 \]. However, the nature of the relationship differed somewhat across the dimensions. The trend observed in the previous results held for reliability beliefs in that local hybrid retailers \( (M = 5.77) \) were perceived as more reliable than non-local hybrids \( (M_{500} = 5.06, M_{1500} = 5.07) \), and non-local hybrids more so than IO retailers \( (M = 4.45, \ all \ p < .05) \). However, differences emerged in benevolence beliefs across these groups. The mere presence effect (IO retailer versus non-local hybrids) remained present \( (ps < .05) \), but there is no difference in benevolence beliefs between local and non-local hybrid retailers \( (ps > .05) \). Thus, hypothesis 2a is supported and support for H2b is holds for the reliability dimension of trust. For benevolence, the means of local \( (M = 5.16) \) and non-local hybrids \( (M_{500} = 5.11, M_{1500} = 5.22) \) were statistically equivalent, and higher than the mean for the IO retailer \( (M = 4.43, \ all \ p < .05) \), again revealing the effect of mere physical presence effect. Although the effect was also present for reliability, a difference between local and non-local hybrids was also revealed.

A retailer’s location is also a significant determinant of consumers’ online purchase intentions \[ F_{(3,172)} = 9.01, \ p < .001, \ partial \eta^2 = .13 \] and pre-purchase satisfaction expectations \[ F_{(3,171)} = 9.28, \ p < .001, \ partial \eta^2 = .14 \]. Pairwise comparisons reveal support for hypotheses 3 and 4. Local hybrid retailers elicit higher purchase intentions \( (M = 6.00) \) than their non-local counterparts \( (M_{500} = 5.29, M_{1500} = 5.30) \), and elicit higher purchase intentions than IO retailers \( (M = 4.67) \). Similarly, local hybrid retailers \( (M = 5.86) \) are viewed as being more capable of satisfying consumers’ wants than non-local hybrids \( (M_{500} = 5.11, M_{1500} = 5.15) \) and exhibited greater pre-purchase satisfaction expectations than IO retailers \( (M = 4.44) \). The mere presence of a physical store effect (IO vs. non-local hybrids) is present for purchase intentions \( (ps < .05) \) and consumers’ satisfaction expectations \( (ps < .01) \).

Similar trends are identified with respect to the perceived responsiveness of retailers. Specifically, there is a significant effect of retailer location on service responsiveness \[ F_{(3,172)} = 7.23, \ p < .001, \ partial \eta^2 = .112 \] and responsiveness to potential problems \[ F_{(3,172)} = 7.19, \ p < .001, \ partial \eta^2 = .12 \]. Pairwise comparisons indicate general support for hypothesis 5a and 5c. For both service responsiveness and problem resolution, hybrid retailers are perceived as more responsive to consumers’ needs than retailers without physical stores \( (ps < .05) \). Comparison of local and non-local hybrids suggests that local hybrids are perceived to be more responsive than
non-local hybrid retailers ($p < .05$), supporting H5b and H5d. Moreover, non-local hybrids are also perceived to be more responsive than IO retailers ($p < .05$), again supporting the mere presence effect. The mean values for these groups are illustrated in Figure 3.2.

![Figure 3.2: Means Plots for Study 1](image)

Finally, the means by which the physical store location affects each of the dependent variables was assessed with mediation analyses. This series of hypotheses (H6-H8) suggest that retailer location influences purchase intentions via trust, responsiveness, and expected satisfaction, and that these relationships can be attributed to further mediation of psychological distance. Preliminary requirements for supporting these mediating paths are demonstrated in the preceding discussion (i.e., the effects of retailer location are similarly significant on psychological distance, consumer trust, responsiveness, expected satisfaction, and purchase intentions; Baron and Kenny 1986).
A series of ANCOVAs were performed to formally test the remaining relational paths. Specifically, the respective mediators were entered as covariates, the effects of the mediator on the dependent measure were assessed (see Table 3.4), and the F-values related to the retailer location effects were compared to the F-values of these effects when each mediator was considered as a covariate. Table 3.5 summarizes these ΔF values. These analyses showed that the F-values of retailer location decreased substantively when reliability (ΔF = 5.27), benevolence (ΔF = 2.43), service responsiveness (ΔF = 7.25), responsiveness to problems (ΔF = 7.27), and satisfaction expectations (ΔF = 8.82) mediated the relationship between retailer location and purchase intentions. This analysis supports the mediation paths suggested in H6. Results also indicated that retailer location affected expected satisfaction via reliability (ΔF = 5.66), benevolence (ΔF = 7.24), service responsiveness (ΔF = 6.63), and responsiveness to problems (ΔF = 7.16), supporting H7. Results also showed that psychological distance mediated paths from retailer location to reliability (ΔF = 3.28), benevolence (ΔF = 1.40), service

| Table 3.4: Study 1 Mediation Analysis – Effects of Mediators on Dependent Factors |
|-------------------------------|-----|-----|-----|-----|-----|
| Mediador Variables           | REL | BEN | SR  | PR  | ES  | PI  |
| Psychological Distance (PD)  | 9.16 | 4.13 | 10.65 | 7.57 | 7.96 | 11.54 |
| Reliability (REL)            | -   | -   | 92.46 | 158.53 | 766.15 | 1159.37 |
| Benevolence (BEN)            | -   | -   | 114.43 | 199.05 | 608.69 | 337.62 |
| Service Responsiveness (SR)  | -   | -   | -   | -   | 124.31 | 346.98 |
| Problem Responsiveness (PR)  | -   | -   | -   | -   | 230.23 | 353.69 |
| Expected Satisfaction (ES)   | -   | -   | -   | -   | -   | 1515.52 |

* a p < .001, b p < .01, c p < .05

| Table 3.5: Study 1 Mediation Analysis – Reduction in F-values for Retailer Location When Mediator is Modeled as a Covariate |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|
| Mediador Variables           | ΔF  | ΔF  | ΔF  | ΔF  | ΔF  | ΔF  |
| Psychological Distance (PD)  | 3.28 | 1.40 | 4.12 | 3.65 | 4.16 | 4.61 |
| Reliability (REL)            | -   | -   | 5.08 | 5.37 | 5.66 | 5.27 |
| Benevolence (BEN)            | -   | -   | 1.30 | 0.80 | 7.24 | 2.43 |
| Service Responsiveness (SR)  | -   | -   | -   | -   | 6.63 | 7.25 |
| Problem Responsiveness (PR)  | -   | -   | -   | -   | 7.16 | 7.27 |
| Expected Satisfaction (ES)   | -   | -   | -   | -   | -   | 8.82 |

* a partial mediation  
  b full mediation
responsiveness (\(\Delta F = 4.12\)), responsiveness to problems (\(\Delta F = 3.65\)), expected satisfaction (\(\Delta F = 4.16\)), and purchase intentions (\(\Delta F = 4.61\)), supporting H8

**Study 1 Discussion and Additional Research Questions**

The results of the first study support the assertion that a retailer’s physical distance from a customer’s geographic location is an important consideration, even in online purchase decisions. Hybrid retailers with a local store presence were favored over non-local hybrid retailers in terms of responsiveness perceptions, trust, satisfaction expectations, and purchase intentions. Further, non-local hybrid retailers were preferred over IO retailers, which is consistent with a mere presence effect. This effect suggests that retailers can benefit from communicating physical attributes even if a local presence is not feasible. However, the differences between local and non-local hybrid firms identified in Study 1 suggest that non-local retailers must make further efforts to compete with local hybrid retailers.

Positioning local stores in all geographic markets would not be a cost-effective strategy for most firms; however, retailers may be able to focus their efforts on the tangibility component of psychological distance. Bar-Anan, Liberman, and Trope (2006) suggest that a concrete understanding of a perceived target is closely related to the perceiver’s ability to evoke apparent features of the target. Supporting the physical presence cue with information beyond geographic distance may enhance consumers’ tangibility perceptions and increase consumers’ understanding of retailers’ physical attributes. Media depicting images of a retailer’s physical attributes are likely to increase tangibility and make the firm’s attributes less abstract, thus reducing psychological distance. For example, images highlighting a retailer’s bricks-and-mortar facilities, (e.g., exterior views, in-store displays) or service employees would give consumers more intimate knowledge of the retailer in terms of its physical and human attributes.

This logic prompts several research questions. Can media depicting a firm’s tangible assets or offline processes reduce psychological distance and if so, do the benefits have implications for marketing outcomes? Do differences in the effectiveness of media exist across retailer types or would the media benefit local and non-local hybrids to the same extent as IO retailers? There has been a longstanding need for research examining methods for imitating the exchange characteristics of physical environments (Castelfranchi and Tan 2001). However, despite the abundance of findings citing structural assurances, web design, brand familiarity, and reputation mechanisms as means by which both IO retailers and hybrid retailers can influence
consumers’ perceptions, beliefs, and behavior, the mimicking of the physical purchase environment has been largely overlooked. Few works have offered any guidance in this regard. Some notable exceptions include the management of avatars (Holzwarth et al. 2006), live customer service chats, and virtual advisors (Urban, Sultan, and Qualls 2000).

Thus, Study 2 will examine media as a possible means by which both hybrid and IO retailers can shift consumers’ perspectives from that of making a purchase from a website (i.e., a Human-Computer-Interaction/HCI) to making a purchase from a company via the Internet (i.e., a Computer-Mediated-Interaction/CMI; Morkes, Kernal, and Nass 1999). Past research has shown that people respond psychosocially to technology as they do to people (Moon 2003; Nass, Lombard, Henriksen and Steur 1995). Holzwarth, Janiszewski, and Neumann (2006) extended this research stream into the online marketing context, demonstrating that when online interactions are shifted from HCI to CMI, consumers’ attitudes, satisfaction judgments, and behavioral intentions are improved. Despite common inferences, even Internet-only retailers have employees and physical facilities. Overall, Study 2 proposes that distant (non-local) online retailers can reduce psychological distance and increase marketing outcomes to a level commensurate with local hybrids by communicating physical channel information.

**STUDY 2 RESEARCH HYPOTHESES**

Liberman and Trope (2006) demonstrated that psychologically distant objects are characterized by vague, abstract, intangible, and hypothetical perceptions of the objects. Alternatively, more apparent, concrete, and tangible traits are perceived to be more real, and are associated with more psychologically proximal objects. Furthermore, Trope and Liberman (2003) discuss the role of *hypotheticality* in psychological distance perceptions, suggesting that tangibility increases the concrete construal (i.e., interpretation and understanding of the object’s attributes) of objects and results in reduced psychological distance perceptions. “Concrete aspects of distal targets are vague, and perceivers must rely on their knowledge about the category of a target in order to judge it (Bar-Anan, Liberman and Trope 2006, p. 609).” Extended to the Internet retail context, this quote suggests that until consumers process concrete information about a retailer’s characteristics, they will base specific perceptions on their generalized knowledge and beliefs about Internet retailers. Media depicting more specific attributes of a firm, such as its physical facilities and employees, provides concrete imagery of firm, reduces the vagueness of retailers’ attributes, and should decrease psychological distance.
H9: Consumers who are exposed to media depicting a retailer’s (a) physical buildings or (b) service employees will perceive less psychological distance between themselves and the retailer than consumers not exposed to such media.

The impersonal nature of the Internet severely limits retailers’ capacity to convey trust via traditional cues (i.e., consumers’ ability to observe service delivery prior to purchase; Ba, Whinston and Zhang 1999; Citera, Beauregard and Mitsuya 2005). The spatial separation of the retailer from the consumer and the lack of tangible evaluations further increase the uncertainty in online transactions. Pavlou and Gefen (2004) suggest that intangibility derived uncertainty can be reduced when trust is transferred to an Internet transaction based on the retailer belonging to a larger group of firms. This process, called *transference*, occurs when the trustor bases initial trust in a target (e.g., an Internet retailer) on trust in a related target or group (e.g., offline retailers), or on a context in which the target is encountered (e.g., the online or offline purchase environment). In this sense, consumers buying online base their trust in the “community of sellers” in the offline purchase environment (Pavlou and Gefen 2004, p. 40). More specifically, even when the purchase encounter takes place on the Internet, the retailer’s offline channel presence prompts consumers to categorize the retailer as a member of the physical purchase environment, a group from which the consumer transfers generalized trust to the transaction under consideration (Campbell 1958). In the online retail context, transference theory suggests that consumers use a retailer’s physical presence to support an assumption that a firm subscribes to the norms of traditional purchase situations.

Pettit (2004) also finds that trust may be established via (1) interaction with the target – direct observation of the trustee’s characteristics, (2) evidence framing – seeing the trust target interacting with others, or (3) consulting accumulated evidence of the target’s behavior. Extending Pettit’s suggestions, a consumer would develop initial trusting beliefs by observing relevant retailer characteristics. Such observations might be made by browsing a website and gaining knowledge of the retailer’s structural attributes (e.g., physical presence, policies and procedures, website security), viewing media depicting service employees, or consulting sources of consumer ratings for objective evidence regarding the retailer’s past performance. In sum, transference theory and findings related to trust development suggest the following hypotheses.
H10: Consumers who are exposed to media depicting a retailer’s (a) physical buildings or (b) service employees will exhibit greater trust in the retailer than consumers who are not exposed to such media.

H11: Consumers who are exposed to media depicting a retailer’s (a) physical buildings or (b) service employees will exhibit greater intentions to purchase from the retailer than consumers not exposed to such media.

Perceptions of an unknown entity are related to the similarity, proximity and common fate of the entity from which the perceiver is transferring knowledge (Campbell 1958). This “entitativity” (p. 17) describes the extent to which the entities are members of the same group. The relatedness of the group members (e.g., retailers with physical stores) causes transfer of perceptions and expectations to occur when information is being processed about a new entity when it is determined to be in a similar category (Hamilton and Sherman 1996). Essentially, entitativity perceivers form expectations for the unknown entity that are common and consistent with their expectations of other members in the group. In the online retail context, transference theory would suggest that consumers may use media depicting physical facilities and/or employees to relate Internet retailers to firms that exist in physical space. Study 1 demonstrated that consumers expect to be more satisfied by hybrid firms and perceive hybrid firms to be more responsive. Media may be successful in further stimulating the transference process for Internet retailers.

H12: Consumers exposed to pictures of a retailer’s (a) buildings or (b) employees will expect to be more satisfied than when not exposed to such media.

H13: Consumers exposed to pictures of a retailer’s (a) buildings or (b) employees will perceive the retailer as more responsive than when not exposed to such media.

Study 1 demonstrated that a retailer’s mere physical presence elicits less psychological distance and improves marketing outcomes. Because hybrid retailers are already associated with the physical environment and this association is the mechanism by which the media are proposed to transfer onto consumers’ psychological distance perceptions, trust beliefs, responsiveness perceptions, satisfaction expectations, and purchase intentions, it is likely that the media will be more effective for Internet-only retailers than for hybrid firms. Another interpretation of this phenomenon is that an actual physical channel presence may not be as important when media is
used to associate the retailer with the physical environment. Both of these suggestions are implicit in the following hypothesized interactions.

H14: The main effects of media on each of the dependent measures will be attenuated when the retailer has a physical retail presence such that differences between picture and no picture groups will be smaller for local and non-local hybrids than for IO retailers.

STUDY 2: REPLICATION OF STUDY 1 AND TRANSFERRENCE EFFECTS

Method

Subjects and Design. Hypotheses were tested using a 3 (Retailer Location: local, 1500 miles away, and Internet only) x 2 (Building pictures: present, absent) x 2 (Employee pictures: present, absent) between subjects design. The 500-mile condition was not used in Study 2 because Study 1 results mirrored the results of the 1500-mile condition. Similar to study 1, the dependent measures were psychological distance, consumer trust in the retailer (benevolence and reliability measures), perceived responsiveness, expected satisfaction, and purchase intentions. Five hundred thirty-seven undergraduate business students were recruited to participate in the experiment and given extra credit for their participation.

Procedure. Respondents were randomly assigned to one of the twelve conditions upon visiting the homepage of the online study. Subjects were then directed to a second web page that presented a brief purchase scenario that presented the location information (echoing the wording used in Study 1). Participants were asked to review the retailer’s website and select one of five laptop computers. Then subjects responded to the dependent measures and manipulation checks.

Manipulations. A deliberate change was made to the websites of the nine conditions whereby the banner section of the web pages from Study 1 were revised to include pictures of buildings, employees, or both. Figure 3.3 shows the picture of the manipulations, which were developed based on pre-testing with a different sample of undergraduate students (n = 42) at the same university. Specifically, subjects in the pretest were sequentially shown pictures of four buildings and four pictures of employees at work. Then they selected any answer choice that they thought was a plausible description of the picture under consideration. Subjects could select all of the answer choices or none and were also encouraged to fill in their own descriptor if desired. In all, 57.1% of subjects indicated that the building selected for the Study 2 manipulations was likely to be an office building, 61.9% of subjects indicated that it could be construed as the headquarters of an Internet firm, and 23.8% of subjects indicated that the
building might contain a computer retail store. Other choices included ‘library’ (9.5%) and ‘a restaurant’ (0%). The building selected also elicited the highest responses on a 9-point Likert scale item, reading, “What is the likelihood that this building would be shown on the website of an Internet computer retailer?” Paired-sample t-tests concluded that the mean response for the selected building (M = 7.95) was significantly higher than the means of the other buildings (all ps < .001). Two pictures of the same building were shown in the building pictures manipulation as shown in Figure 3.3. The pictures of firm employees were chosen in a similar manner. Pre-tests indicated that the ‘employee pictures’ selected were the most likely to appear (M = 6.05) on the website of an Internet computer retailer (all ps < .001). Moreover, 71.4% of subjects indicated that the pictures were of employees in the shipping department of a computer retailer.

Figure 3.3: Study 2 Experimental Manipulations – Webpage Headers
Dependent Measures. The same dependent factors employed in Study 1 were measured with 9-point Likert scales in Study 2, with one exception; the psychological distance items were revised to include a more comprehensive set of psychological distance concepts. Although the scale performed well in the first study, the items did not represent a complete operationalization of the psychological distance construct as conceptualized in this dissertation. Bar-Anan, Liberman, and Trope (2006) apply an implicit association test with a proximity measurement that is adequate for testing their hypotheses, but the present research requires a measure that captures components of psychological distance beyond mere proximity (e.g., tangibility, vagueness, and hypotheticality). Thus, Study 2 employed four semantic differential items assessing Tangibility (very intangible/ very tangible) and Vagueness (very vague/ very apparent) of features, Hypotheticality of the retailer’s location (very hypothetical/ very real) and perceived Distance of the retailer from the consumer (very near/very far), which yielded a construct reliability of .84.

Preliminary Analyses. The psychometric properties of the measures were again assessed using confirmatory factor analysis (CFA). All scales were simultaneously tested, with each item being allowed to load on only its respective factor. The results of the CFA, shown in Table 3.6, suggest that the measurement model offered good fit to the data ($\chi^2 = 1312.2$; $df = 459$; CFI = .94; NNFI = .94; RMSEA = .06). Moreover, all variables exhibited sufficient construct reliability, convergent validity, and discriminant validity based on Fornell and Larcker’s (1981) criteria. Construct reliabilities ranged from .84 to .96. Responses to manipulation checks indicated that approximately 79.89% of subjects correctly recalled the correct experimental condition, leaving 429 cases suitable for analysis. Cell sizes ranged from 30 to 41.

<table>
<thead>
<tr>
<th>Study 2 Construct Reliabilities (c.r.), Average Variances Extracted (Diagonal), and Shared Variances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Psychological Distance (PD)</td>
</tr>
<tr>
<td>Trust - Reliability (REL)</td>
</tr>
<tr>
<td>Trust – Benevolence (BEN)</td>
</tr>
<tr>
<td>Service Responsiveness (SR)</td>
</tr>
<tr>
<td>Problem Responsiveness (PR)</td>
</tr>
<tr>
<td>Expected Satisfaction (ES)</td>
</tr>
<tr>
<td>Purchase Intentions (PI)</td>
</tr>
<tr>
<td>Product Knowledge (PK)</td>
</tr>
<tr>
<td>Internet Concern (IC)</td>
</tr>
</tbody>
</table>
Study 1 Replication. Prior to testing hypotheses, the three ‘no pictures’ conditions were tested to further establish the results of study one. The new psychological distance measure employed in the second study also warranted such replication. Thus, an ANOVA model using only the conditions matching those used in Study 1 was tested. Results demonstrated similar effects of retailer location on all factors, including the revised psychological distance measure. These results are summarized in Tables 3.7 thru 3.9, and shown graphically in Figure 3.4.

The psychological distance mean for the IO retailer group ($M = 6.87$) was again significantly higher than for the retailer at 1500 miles ($M = 5.85$, ($p < .05$)) and the local retailer ($M = 5.06$, ($p < .01$)), and the local retailer was less distant than the retailer at 1500 miles ($p < .05$). Similar effects were identified for trust beliefs. The reliability and benevolence means, respectively, for the local retailer group ($M = 5.40$, $M = 5.06$) were higher than for the retailer at 1500 miles ($M = 4.61$, $M = 4.77$). The differences between the local and non-local hybrid were again significant for reliability ($p < .05$) but not benevolence ($p > .05$). Moreover, the local retailer exhibited higher trust beliefs than the IO retailer ($M = 3.40$, $M = 3.64$, ($ps < .01$)), and the retailer at 1500 miles was more trusted than the IO retailer ($ps < .05$).

Service and problem responsiveness perceptions, respectively, for the local retailer ($M = 5.23$, $M = 5.51$) were higher than for the retailer at 1500 miles ($M = 4.45$, $M = 4.69$, ($ps < .05$)) and the local retailer had superior responsiveness than the IO retailer ($M = 3.31$, $M = 3.48$, ($ps < .01$)). In addition, the retailer at 1500 miles had greater responsive perceptions than the IO retailer ($ps < .05$). Similarly, respondents expected greater satisfaction from local retailers ($M = 5.13$) than retailers at both 1500 miles ($M = 4.41$, ($p < .05$)) and IO retailers ($M = 3.27$, ($p < .01$)), and greater satisfaction from retailers at 1500 miles than IO retailers ($p < .05$). Purchase intentions were higher for local retailers ($M = 5.05$) than for retailers at both 1500 miles ($M = 4.41$, ($p < .05$)) and IO retailers ($M = 3.22$, ($p < .01$)), and higher for retailers at 1500 miles than IO retailers ($p < .05$).

Psychological distance was again shown to mediate the relationship between retailer location and reliability ($\Delta F = 12.49$), benevolence ($\Delta F = 8.20$), service and problem responsiveness ($\Delta F = 17.05$, $0.93$), expected satisfaction ($\Delta F = 18.06$), and purchase intentions ($\Delta F = 18.94$). The reliability and benevolence dimensions, respectively, were shown to mediate the path to service responsiveness ($\Delta F = 13.47$, $\Delta F = 4.53$), problem responsiveness ($\Delta F = 4.30$, $\Delta F = 10.54$), expected satisfaction ($\Delta F = 15.03$, $\Delta F = 4.08$), and purchase intentions ($\Delta F = 16.58$, $\Delta F = 5.19$). Service and problem responsiveness, respectively, were shown to mediate the path
to expected satisfaction ($\Delta F = 19.35, \Delta F = 18.21$), and purchase intentions ($\Delta F = 21.80, \Delta F = 19.66$); and expected satisfaction mediated the path to purchase intentions ($\Delta F = 25.23$).

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>F (partial $\eta^2$)</th>
<th>Local</th>
<th>1500 mi.</th>
<th>Internet-Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psych. Distance</td>
<td>16.38 (.25)$^{p}$</td>
<td>5.06 (.224)</td>
<td>5.85 (.200)</td>
<td>6.87 (.224)</td>
</tr>
<tr>
<td>Reliability Beliefs</td>
<td>13.73 (.22)$^{p}$</td>
<td>5.40 (.273)</td>
<td>4.61 (.243)</td>
<td>3.40 (.273)</td>
</tr>
<tr>
<td>Benevolence Beliefs</td>
<td>13.29 (.21)$^{p}$</td>
<td>5.06 (.208)</td>
<td>4.77 (.185)</td>
<td>3.64 (.208)</td>
</tr>
<tr>
<td>Service Responsiveness</td>
<td>19.97 (.29)$^{p}$</td>
<td>5.23 (.216)</td>
<td>4.45 (.192)</td>
<td>3.31 (.216)</td>
</tr>
<tr>
<td>Problem Responsiveness</td>
<td>17.21 (.26)$^{p}$</td>
<td>5.51 (.246)</td>
<td>4.69 (.219)</td>
<td>3.48 (.246)</td>
</tr>
<tr>
<td>Satisfaction Expectation</td>
<td>27.29 (.34)$^{p}$</td>
<td>5.13 (.187)</td>
<td>4.41 (.187)</td>
<td>3.27 (.187)</td>
</tr>
<tr>
<td>Purchase Intentions</td>
<td>26.47 (.35)$^{p}$</td>
<td>5.05 (.179)</td>
<td>4.30 (.160)</td>
<td>3.22 (.179)</td>
</tr>
</tbody>
</table>

$\eta^2$ = partial eta square

$^a p < .001$, $^b p < .01$, $^c p < .05$

Figure 3.4: Means Plots for Replication of Study 1
After replicating the results of Study 1 with the revised measure of psychological distance, a 3 (retailer location) x 2 (building pictures) x 2 (employee pictures) ANOVA was computed for all dependent variables. Results are summarized in Table 3.10.

**Psychological Distance.** The ANOVA results indicated significant main effects of retailer location \( [F_{2,403} = 14.69, p < .001, \text{partial } \eta^2 = .07] \), building pictures \( [F_{1,403} = 10.41, p < .01, \text{partial } \eta^2 = .03] \), and employee pictures \( [F_{1,403} = 15.22, p < .001, \text{partial } \eta^2 = .04] \) on psychological distance. LSD comparisons revealed that the resulting means were in the hypothesized directions, supporting H9. Local retailers \( (M = 5.24) \) were more psychologically proximal \( (p < .05) \) than retailers at 1500 miles \( (M = 4.72) \), and both hybrid retailers were more proximal than the IO retailer \( (M = 4.35, ps < .05) \). These results were qualified by two significant interactions. The means plot (see Figure 3.5) of the Retailer Location * Building
### Table 3.10: Study 2 F-Values and Partial Eta Square Statistics for the Effects of Retailer Location, Building Pictures, and Employee Pictures

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variables</th>
<th>REL</th>
<th>BEN</th>
<th>SR</th>
<th>PR</th>
<th>ES</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>η²</td>
<td>F</td>
<td>η²</td>
<td>F</td>
<td>η²</td>
<td>F</td>
</tr>
<tr>
<td>Retailer Location (LOC)</td>
<td>14.69&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.070</td>
<td>13.67&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.065</td>
<td>11.73&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.055</td>
<td>15.60&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Building Pictures (Bpic)</td>
<td>10.41&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.026</td>
<td>11.77&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.029</td>
<td>17.95&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.042</td>
<td>9.58&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Employee Pictures (Epic)</td>
<td>15.22&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.037</td>
<td>10.38&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.026</td>
<td>14.14&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.034</td>
<td>8.54&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>LOC * Bpic</td>
<td>4.67&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.023</td>
<td>3.18&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.016</td>
<td>1.63</td>
<td>.008</td>
<td>2.77</td>
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<tr>
<td>LOC * Epic</td>
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<td>.013</td>
<td>3.18&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.016</td>
<td>1.63</td>
<td>.008</td>
<td>2.77</td>
</tr>
<tr>
<td>Bpic * Epic</td>
<td>10.99&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.027</td>
<td>10.73&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.027</td>
<td>13.96&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.033</td>
<td>11.99&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>LOC * Bpic * Epic</td>
<td>1.79</td>
<td>.009</td>
<td>1.98</td>
<td>.010</td>
<td>0.68</td>
<td>.003</td>
<td>1.34</td>
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### Effects of Mediators on Dependent Variables (F-Values and Partial Eta Square Statistics)

<table>
<thead>
<tr>
<th>Mediators</th>
<th>REL</th>
<th>BEN</th>
<th>SR</th>
<th>PR</th>
<th>ES</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Distance</td>
<td>3832.33&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.908</td>
<td>1954.29&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.834</td>
<td>2133.42&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.845</td>
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<tr>
<td>Reliability</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Benevolence</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Service Responsiveness</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Problem Responsiveness</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Expected Satisfaction</td>
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<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
</tr>
</tbody>
</table>

### Changes in F-values of the Independent Variables when Mediators are Covariates

<table>
<thead>
<tr>
<th>Mediators</th>
<th>∆Fs on REL</th>
<th>∆Fs on BEN</th>
<th>∆Fs on SR</th>
<th>∆Fs on PR</th>
<th>∆Fs on ES</th>
<th>∆Fs on PI</th>
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</thead>
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<tr>
<td>Psychological Distance (PD)</td>
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<td>10.12</td>
<td>7.95</td>
<td>12.71</td>
<td>10.10</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Trust - Benevolence (BEN)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Service Responsiveness (SR)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Problem Responsiveness (PR)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Expected Satisfaction (ES)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: η² = partial eta square

<sup>a</sup>p < .001  
<sup>b</sup>p < .01  
<sup>c</sup>p < .05
Table 3.11: Study 2 Pairwise Comparisons for Within Retailer Location Group Conditions
Means and Corresponding Significance Levels for Differences Between Picture Conditions and (No Picture Conditions)

<table>
<thead>
<tr>
<th></th>
<th>Internet-Only Retailers</th>
<th>Retailers 1500-miles away</th>
<th>Local Retailers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>vs. Building</td>
<td>5.30&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.16&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Employees</td>
<td>5.32&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.14&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Both Pictures</td>
<td>5.16&lt;sup&gt;a&lt;/sup&gt;</td>
<td>5.27&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

|                      | 1500 Building           | 5.15<sup>c</sup>          | 5.37<sup>c</sup>    | 5.50<sup>c</sup>    | 5.15<sup>c</sup>    | 5.48<sup>c</sup>    | 5.00<sup>c</sup>    | 4.93<sup>c</sup>    |
|                      | Employees               | 5.23<sup>c</sup>          | 5.23<sup>c</sup>    | 5.41<sup>c</sup>    | 5.08<sup>c</sup>    | 5.29<sup>c</sup>    | 5.00<sup>c</sup>    | 4.93<sup>c</sup>    |
|                      | Both Pictures           | 5.17<sup>c</sup>          | 5.27<sup>c</sup>    | 5.47<sup>c</sup>    | 5.11<sup>c</sup>    | 5.37<sup>c</sup>    | 5.10<sup>c</sup>    | 4.95<sup>c</sup>    |

|                      | Local Building          | 4.95                      | 5.67                | 5.53                | 5.18                | 5.64                | 5.00                | 4.70                |
|                      | Employees               | 4.63                      | 5.96                | 5.87                | 5.60                | 6.01                | 5.33                | 5.11                |
|                      | Both Pictures           | 4.83                      | 5.71                | 5.87                | 5.54                | 5.77                | 5.47                | 5.38                |

Note:  
<sup>a</sup> p < .001  
<sup>b</sup> p < .01  
<sup>c</sup> p < .05

Table 3.12: Study 2 Pairwise Comparisons for Pictures Conditions
Means and Corresponding Significance Levels for Differences Between All Conditions and (Local w/ Both Pictures Condition)

<table>
<thead>
<tr>
<th>Local w/ Both Types of Pictures</th>
<th>Psych. Distance (M = 4.83)</th>
<th>Reliability (M = 5.71)</th>
<th>Benevolence (M = 5.87)</th>
<th>Service Response (M = 5.54)</th>
<th>Problem Response (M = 5.77)</th>
<th>Expected Satisfaction (M = 5.47)</th>
<th>Purchase Intentions (M = 5.38)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1500 Both Pictures</td>
<td>5.17</td>
<td>5.27</td>
<td>5.47</td>
<td>5.11</td>
<td>5.37</td>
<td>5.10</td>
<td>4.95</td>
</tr>
<tr>
<td>IO Both Pictures</td>
<td>5.16</td>
<td>5.27</td>
<td>5.40</td>
<td>5.05</td>
<td>5.34</td>
<td>4.98</td>
<td>4.86</td>
</tr>
<tr>
<td>Local Buildings</td>
<td>4.95</td>
<td>5.67</td>
<td>5.53</td>
<td>5.18</td>
<td>5.64</td>
<td>5.00</td>
<td>4.70</td>
</tr>
<tr>
<td>1500 Buildings</td>
<td>5.15</td>
<td>5.37</td>
<td>5.50</td>
<td>5.15</td>
<td>5.48</td>
<td>5.20</td>
<td>4.93</td>
</tr>
<tr>
<td>IO Buildings</td>
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<td>5.16</td>
<td>5.27</td>
<td>4.96</td>
<td>5.18</td>
<td>4.85</td>
<td>4.71</td>
</tr>
<tr>
<td>Local Employees</td>
<td>4.63</td>
<td>5.96</td>
<td>5.87</td>
<td>5.60</td>
<td>6.01</td>
<td>5.33</td>
<td>5.11</td>
</tr>
<tr>
<td>1500 Employees</td>
<td>5.23</td>
<td>5.23</td>
<td>5.41</td>
<td>5.08</td>
<td>5.29</td>
<td>5.00</td>
<td>4.93</td>
</tr>
<tr>
<td>IO Employees</td>
<td>5.32</td>
<td>5.14</td>
<td>5.21&lt;sup&gt;c&lt;/sup&gt;</td>
<td>4.93&lt;sup&gt;c&lt;/sup&gt;</td>
<td>5.17</td>
<td>4.86</td>
<td>4.63&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>Local None</td>
<td>5.06</td>
<td>5.40</td>
<td>5.06&lt;sup&gt;c&lt;/sup&gt;</td>
<td>5.23</td>
<td>5.51</td>
<td>5.13</td>
<td>5.05</td>
</tr>
<tr>
<td>1500 None</td>
<td>5.85&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.61&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.77&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.45&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.69&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.41&lt;sup&gt;b&lt;/sup&gt;</td>
<td>4.30&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>IO None</td>
<td>6.83&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.45&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.67&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.35&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.53&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.30&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.25&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note:  
<sup>a</sup> p < .001  
<sup>b</sup> p < .01  
<sup>c</sup> p < .05

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Figure 3.5: Plots of Retailer Location * Building Picture Interactions on Dependent Factors
Figure 3.6: Plots of Retailer Location * Employee Picture Interactions on Dependent Factors
Figure 3.7: Means Plots Within Retailer Location Conditions
Pictures interaction \( [F_{(2,403)} = 4.67, p < .01, \text{partial } \eta^2 = .02] \) reveals that the building pictures are most influential in reducing psychological distance for IO retailers and non-local hybrids, but have no effect on local retailers. The same trend is present for employee pictures, but the interaction is not statistically significant \( (p = .07) \). In fact, LSD pairwise comparisons indicated that all experimental conditions with building and/or employee pictures were perceived to be as psychologically proximal as local retailers (see Table 3.12). The only conditions that were perceived to be more psychologically distant were the IO and non-local hybrid retailers whose websites included no pictures.

The means resulting from a significant Building Pictures * Employee Pictures interaction \( [F_{(1,403)} = 10.99, p < .01, \text{partial } \eta^2 = .03] \) show that both types of media content generally reduce psychological distance, but do not have additive effects (see Figure 3.7). The building pictures are just as effective as the employee pictures and vice versa, but neither affects psychological distance when the other is present.

**Reliability and Benevolence.** Retailer location \( [F_{(2,404)} = 13.67, p < .001, \text{partial } \eta^2 = .07] \), building pictures \( [F_{(1,404)} = 11.77, p < .001, \text{partial } \eta^2 = .03] \), and employee pictures \( [F_{(1,404)} = 10.38, p < .01, \text{partial } \eta^2 = .03] \) all affected reliability beliefs. Main effects of retailer location \( [F_{(2,416)} = 11.73, p < .001, \text{partial } \eta^2 = .06] \), building pictures \( [F_{(1,416)} = 17.95, p < .001, \text{partial } \eta^2 = .04] \), and employee pictures \( [F_{(1,416)} = 14.14, p < .001, \text{partial } \eta^2 = .03] \) were also present on benevolence. LSD contrasts again revealed mean differences on these factors consistent with H10. Local retailers \( (M = 5.63) \) were believed to be more reliable than retailers at 1500 miles \( (M = 5.10, p < .01) \) and IO retailers \( (M = 4.74, p < .01) \); and retailers at 1500 miles elicited significantly higher reliability beliefs than IO retailers \( (p < .05) \). Benevolence beliefs were also higher for local retailers \( (M = 5.69) \) than retailers at 1500 miles \( (M = 5.28, p < .05) \) and IO retailers \( (M = 4.88, p < .01) \); and retailers at 1500 miles were believe to be more benevolent than IO retailers \( (p < .05) \).

The Retailer Location * Building Pictures and Retailer Location * Employee Pictures interactions were both significant \( (p < .05) \) on reliability beliefs, but not on benevolence beliefs. As expected, means resulting from the interactions on reliability yield an inverse pattern to the psychological distance means (i.e., the pictures substantially affect beliefs about IO retailers, but these effects are attenuated for hybrid retailers). Specifically, reliability beliefs are higher for IO retailers using the building pictures \( (M = 5.21) \) than for IO retailers with no building pictures \( (M \)
and reliability beliefs are higher for IO retailers using the employee pictures ($M = 4.28, p < .01$) than for IO retailers with no employee pictures ($M = 4.27, p < .01$). The reliability means for the retailer at 1500 miles were statistically equivalent across building pictures ($M = 5.27$) and no-building picture conditions ($M = 4.90, p > .05$); and similarly equal across local retailer with building pictures ($M = 5.68$) and without building pictures ($M = 5.56, p > .05$). For the employee pictures, means also suggested statistical equivalence for both retailers at 1500 miles ($M_{\text{emp-pics}} = 5.21$ and $M_{\text{no-emp-pics}} = 4.93, p > .05$) and local retailers ($M_{\text{emp-pics}} = 5.72$ and $M_{\text{no-emp-pics}} = 5.54, p > .05$). At first glance, these results suggest that the benefits of both building and employee pictures are limited to IO retailers. However, Table 3.11 again shows that both types of pictures increased reliability beliefs for IO retailers and retailers at 1500-miles to a level commensurate with the local retailer, even when the local retailer’s website also featured the pictures ($ps > .05$). There was no interaction between either picture type and retailer location on benevolence beliefs, suggesting that the pictures increased benevolent beliefs consistently across all three retailer types.

The Building Pictures * Employee Pictures interaction remained significant and means plots reinforce the non-additive effects of the media content when the other media is already displayed on the retailer’s website. Specifically, neither reliability beliefs nor benevolence beliefs increase for any retailer type when the pictures are used in combination ($ps > .05$).

**Purchase Intentions.** Results also indicated significant main effects of retailer location [$F_{(2,417)} = 9.98, p < .001$, partial $\eta^2 = .05$], building pictures [$F_{(1,417)} = 5.58, p < .05$, partial $\eta^2 = .01$], and employee pictures [$F_{(1,417)} = 6.90, p < .01$, partial $\eta^2 = .02$] on purchase intentions. LSD comparisons revealed that the resulting means were in the hypothesized directions, supporting H11. Local retailers ($M = 5.24$) retained higher purchase intentions ($p < .05$) than retailers at 1500 miles ($M = 4.72$), and both hybrid retailers had higher purchase intentions than the IO retailer ($M = 4.35, ps < .05$). The purchase intentions results were qualified only by a Building Pictures * Employee Pictures interaction [$F_{(1,417)} = 5.06, p < .05$, partial $\eta^2 = .01$]. Group means, plotted in Figure 3.7, show that both types of media content generally improve purchase intentions, but again, do not have additive effects. In addition, pairwise comparisons showed that building pictures and the combination of building and employee pictures on the non-local hybrid and IO retailer websites elicit purchase intentions similar to local retailers, even when the local retailers employed both picture types. Although Table 3.11 shows that employee
pictures also increased purchase intentions for IO retailers, Table 3.12 demonstrates that the employee pictures alone did not bring purchase intentions up to the level of local stores.

**Expected Satisfaction and Service Perceptions.** As summarized in Table 3.10, results also demonstrated significant main effects of retailer location \( [F_s = 11.74, 15.60, \text{ and } 18.55, \ p_s < .001] \), building pictures \( [F_s = 11.92, 9.58, \text{ and } 11.43, \ p_s < .05] \), and employee pictures \( [F_s = 8.46, 8.54, \text{ and } 8.30, \ p_s < .05] \) on expected satisfaction, service responsiveness, and problem responsiveness, respectively. LSD comparisons were again consistent with H12 and H13, revealing that both local retailers \( (M_s = 5.34, 5.49, \text{ and } 5.81) \) were preferred over hybrid retailers at 1500 miles \( (M_s = 4.93, 4.91, \text{ and } 5.17, \text{ all } \ p_s < .05) \) IO retailers \( (M_s = 4.49, 4.56, \text{ and } 4.79, \text{ all } \ p_s < .001) \), and non-local retailers preferred to IO retailers (all \( p_s < .05 \)) for expected satisfaction, service responsiveness, and problem responsiveness, respectively. The Building Pictures * Employee Pictures interactions were again significant, suggesting the same pattern as reported for purchase intentions (building pictures and employee pictures are similarly effective, but do not have additive effects). There were also a significant Retailer Location * Building Pictures and Retailer Location * Employee Pictures interactions on the problem responsiveness factor (both \( p_s < .05 \)); the p-values associated with both of these interactions on service responsiveness were .064 and .060 and for satisfaction were .19 and .08.

For problem responsiveness, the plots of these interactions suggest that the pictures have a significant effect on IO retailers, but the media lose their influence when the retailer has already communicated a physical presence (i.e., is known to be either a local or non-local hybrid). Although statistically tenuous, the same trend emerges for the service responsiveness factor. In fact, a closer look at significant mean differences (see Table 3.11) revealed that the media substantially enhances the perceived responsiveness of IO retailers (\( p_s < .001 \)), moderately affects non-local retailers (\( p_s < .05 \)), and has no effect on perceptions of local retailers (\( p_s > .05 \)). This trend is also present for the building pictures interactions on all dependent measures except for purchase intentions, and for the employee pictures interactions on all dependent measures except satisfaction and purchase intentions (see Table 3.11 and Figure 3.7). Lastly, the pair-wise comparisons in Table 3.11 and Table 3.12 illustrate that either pictures of buildings, employees, or a combination thereof increase responsiveness perceptions and satisfaction, and generally do so to the same level as local retailers using both picture types. The one exception to this finding
for satisfaction and responsiveness factors is that the service responsiveness perceptions fell short of being statistically equivalent to the local store level (p = .045).

Mediation. Lastly, mediation analysis revealed a path of effects consistent with the research model. Previous mediation analysis (Study 1, H6 thru H8) suggested that retailer location influences purchase intentions via trust, responsiveness, and expected satisfaction, and that these relationships can all be attributed to psychological distance. H12 and H13 suggest that the same series of mediation paths will be present for the main effects of building and employee pictures. H14 suggested that these main effects may be qualified by interactions, but the interactions were not significant on several factors including benevolence, satisfaction, and purchase intentions. Thus, the following mediation tests focus only on the main effects. ANOVA results supporting H9 thru H11 meet initial mediation requirements (Baron and Kenny 1986). ANCOVAs were performed in the same manner as in Study 1 such that F-values related to picture effects could be compared to the F-values of these effects when each mediator was considered as a covariate. These analyses showed that the F-values associated with both building and employee pictures, respectively, were substantially reduced when reliability and benevolence (∆Fs = 5.20, 5.38), service responsiveness (∆Fs = 5.22, 6.57), responsiveness to problems (∆Fs = 5.57, 6.82), and satisfaction expectations (∆Fs = 4.48, 6.03) were added as covariates in the purchase intentions outcome model. Benevolence mediated the employee picture effects on purchase intentions (∆F = 3.20), but did not substantively reduce the effects of the building pictures. Results also indicated that both building and employee pictures affected expected satisfaction via reliability (∆Fs = 10.82, 6.85), benevolence (∆Fs = 7.30, 2.76), service responsiveness, (∆Fs = 11.47, 8.08), and responsiveness to problems (∆Fs = 11.46, 8.36). Reliability beliefs were also shown to mediate the paths from both building and employee pictures to service responsiveness (∆Fs = 9.46, 6.56) and problem responsiveness (∆Fs = 11.35, 8.14). Psychological distance mediated paths from building and employee pictures to reliability (∆Fs = 11.54, 10.12), benevolence (∆Fs = 12.71, 10.10), service responsiveness (∆Fs = 9.58, 8.28), responsiveness to problems (∆Fs = 11.07, 8.29), expected satisfaction (∆F = 11.47, 8.30) and purchase intentions (∆Fs = 5.57, 6.74). Mediation tests also replicated the Study 1 tests involving the retailer location effects. Table 3.10 summarizes these results and provides more detailed statistical information supporting each of the mediation hypotheses.
Study 2 Discussion and Additional Research Questions

The results of the second study demonstrate that media strategies can affect consumers’ psychological distance perceptions and influence marketing outcomes. Specifically, the main effects of building and employee pictures on trust beliefs, responsiveness, expected satisfaction, and purchase intentions indicated that these factors could all be enhanced by media connecting the online retailers to the physical environment. Although the interaction effects proposed in H14 were not significant for all dependent factors, the mean differences within each of the retailer location conditions (i.e., Table 3.11) demonstrate that pictures of buildings and employees had substantive effects on consumer’s responses on all factors for Internet-only retailers, more moderate effects for non-local hybrids, and null effects for local hybrid retailers. The implications of these results are two-fold. First, media depicting physical facilities and employee service performance tasks are more effective for Internet-only retailers than for hybrid firms. Secondly, some of the benefits of physical channel presence can be held by Internet-only retailers without having to invest in storefronts; and similarly by non-local hybrid retailers without having to establish a local retail presence. Thus far, this research has shown that physical proximity to customers can improve perceptions, beliefs, and expectations of retailers via psychological distance and that media associating Internet retailers with the physical environment can be used to imitate the benefits of retailer location (i.e., Table 3.12). Study 2 also established that Internet-only and non-local retailers stimulate the greatest improvement in consumer responses with media depicting tangible cues.

The next study will build on Studies 1 and 2 by suggesting an additional method by which psychological distance can be reduced. Specifically, Studies 1 and 2 both demonstrate that retailers should provide evidence of their physical location in order to reduce psychological distance. However, it is not generally practical for retailers, especially lesser known retailers, to have retail outlets in numerous geographic locations. Thus, these firms cannot be local to all consumers. However, in the early stages of relationship development, a familiar location could be instrumental for unfamiliar retailers as they build relationships with consumers. In this manner, non-local hybrid retailers could make attempts to be perceived as more proximal via their association with a familiar location. Thus, the question for managers now becomes, can location characteristics affect psychological distance and improving marketing outcomes?
Specifically, psychological distance theory implies that familiar location characteristics would be most desirable for affecting online consumers’ psychological distance perceptions. Thus, a logical research question is, “Would retailers benefit from locating in familiar cities to a greater extent than locating in a less familiar place?” In particular, “Could psychological associations with a familiar city (i.e., more concrete and apparent construal of location attributes), influence psychological distance perceptions?” It is also possible that when a consumer is very unfamiliar with a location, construal of the unfamiliar location would be just as hypothetical and intangible as the assumed geographic location of an Internet-only retailer. Internet-only retailers also exist in physical space, but this attribute is less salient to consumers. As such, the physical attributes of a retailer in an unfamiliar location could be just as abstract as the retailer that does not disclose a physical location. If this phenomenon occurs in Study 3, then the mere presence effect identified in Study 1 would be canceled out when the hybrid retailers’ location is unfamiliar to a consumer. Overall, Study 3 examines whether retailers in familiar locations are more psychologically proximal than those in unfamiliar locations and suggests that unfamiliar locations may limit the marketing advantages of hybrid retailers.

**STUDY 3 RESEARCH HYPOTHESES**

The retail location literature has long established that consumers overestimate distances of stores that are not in their evoked sets (Coshall 1985) and underestimate distances to physical shopping locations that they use frequently and with which they are emotionally involved (Meyer 1977; Pocock and Hudson 1978). Perceptions of distance are typically lower when the perceiver is familiar with a location or entity (Lee 1962; Smith 1976; Potter 1976). These authors have all established that perceivers familiar with a location will estimate the distance to that location as smaller than perceivers that are less familiar with the same location. Because familiarity affects distance perceptions when physical distance is fixed, it follows that familiarity affects distance perceptions via dimensions other than spatial distance. Interestingly, the branding literature already provides some indication of how familiarity might affect psychological distance. Specifically, awareness, which is often operationalized with unaided recall and familiarity items (Keller 1993, Srivastava and Shocker 1991), is related to consumers’ knowledge of what a firm ‘looks like’ and consumers’ ability to quickly envision firm characteristics (Washburn and Plank 2002). These concepts in particular are similar to consumer’s vague, intangible, and hypothetical construal of features as represented in the
psychological distance construct. Thus, retailers in familiar locations should be perceived as less psychologically distant than retailers in unfamiliar locations located at the same geographic distance from consumers.

H15: Consumers will perceive retailers located in familiar cities to be less psychological distant than retailers located in unfamiliar cities.

Location familiarity is also likely to have implications for trust beliefs, expected satisfaction and purchase intentions. Specifically, the Theory of Trust and Power (Luhmann 1979) suggests that familiarity with a firm and its environment is both an important determinant of trust, expectations, and behavior. Familiarity is a proposed to affect trust and behavior by enhancing the understanding of the environment in which the trust target exists. Luhmann also argues that familiarity with a trust target’s environment establishes a structure wherein individuals may form more positive expectations about the target’s future actions (Gulati 1995; Luhmann 1979). Familiarity also enables the generation of expectations based on individual’s previous knowledge (Blau 1964, Gulati 1995). Thus familiarity is necessary for establishing trust beliefs and creating knowledge-based expectations. Similarly, Gefen (2000) suggests that the more familiar people are with such an Internet retailer, the greater their trust in that retailer will be. Indeed, Gefen (2000, p. 733) finds that familiarity influences trust and is “especially strong on people’s intentions to purchase.” In addition, several works have linked customer’s familiarity with online retailers to enhanced satisfaction expectations (Ha and Perks 2005; Söderlund 2002; Tam 2008)

In this study, the retailer’s location gives consumers specific knowledge about the retailer’s physical environment. However, when consumers are unfamiliar with that physical environment, very little additional knowledge is immediately gained. Alternatively, when consumers are familiar with the physical location, familiarity should more readily transmit those concrete associations onto the retailer. Thus, familiarity with a retailer’s location should enhance trust beliefs, expected satisfaction, and purchase intentions.

H16: Consumers will believe that retailers located in familiar cities are more trustworthy than retailers located in unfamiliar cities.
H17: Consumers will expect to be more satisfied by retailers located in familiar cities than retailers located in unfamiliar cities.
H18: Consumers will have greater purchase intentions for retailers located in familiar cities than retailers located in unfamiliar cities. Location familiarity may also affect consumers’ inferences with regards to retailer responsiveness. Social Response to Communication Technologies theory suggests that consumers would interact with the website of a retailer much like they would interact with another person (Holzwarth et al. 2006; Reeves and Nass 1996). In the personal relationship literature, familiarity is a primary driver of responsive behavior. For example, familiarity enhances communication effectiveness and allows individuals to more accurately relate experiences and events to each other (Tizard 1984, 2008). Overall, the relationship literature suggests that responsiveness is facilitated by familiarity (Bretherton and Munholland 1999). Thus, consumers’ knowledge of a retailer’s location may facilitate expectations that the retailer would be more responsive to their needs.

H19: Consumers will believe that retailers located in familiar cities will be more responsive (a) in service delivery and (b) to problems than retailers in unfamiliar cities.

The path from retailer location to purchase intentions (Location \[\rightarrow\] Psychological Distance \[\rightarrow\] Trust \[\rightarrow\] Responsiveness \[\rightarrow\] Expected Satisfaction \[\rightarrow\] Purchase Intentions) that was established in Study 1 and replicated in Study 2 is tested again in Study 3, and is represented by the following set of mediation hypotheses.

H20: (a) Trust, (b) Responsiveness, and (c) Expected Satisfaction will mediate the effect of Location Familiarity on Purchase Intentions;
H21: (a) Trust and (b) Responsiveness will mediate the effects of Location Familiarity on Expected Satisfaction; and
H22: Psychological distance will mediate the effects of Location Familiarity on (a) Trust, (b) Responsiveness, and (c) Expected Satisfaction.

**STUDY 3: EFFECTS OF LOCATION FAMILIARITY**

**Method**

*Subjects and Design.* Hypotheses were tested using a between subjects design with six experimental conditions. Two familiar cities (Aspen, CO and Niagara Falls, NY) two unfamiliar cities (Penrose, CO and Rexford, NY), a local retailer condition, and an IO retailer condition were employed. The dependent measures were psychological distance as operationalized in Study 2, consumer trust in the retailer (benevolence and reliability measures), perceived
responsiveness, expected satisfaction, and purchase intentions. Two hundred and five undergraduate business students participated in the study and were given credit for participation.

Procedure. Respondents were randomly assigned to one of the six conditions upon visiting the homepage of the online study. Subjects were then directed to a second web page that presented the same purchase scenario used in the first two studies. However, in Study 3, the name of the retailer’s city was disclosed to respondents in a sentence that read: “You decide to visit the website of a retailer that has a physical retail store in [CITY NAME] and discover that [CITY NAME] is about 1,710 miles from [Student’s University] and has a population of about 9,580. The distance and population values were constant across conditions and were determined to be plausible based on a pre-test and census data. Participants were again asked to review the retailer’s website and to select one of five laptop computers.

**Laptop Computer Purchase Scenario** (IMPORTANT - Please Read)

Please imagine that you are purchasing a laptop computer from a retailer on the Internet. To save money, you have decided that a refurbished laptop would best suit your budget. You go to [retailer.com] and are given the option of buying from several competing companies. These retailers are all unfamiliar to you, but they all have refurbished laptops in stock, with the features you want. All of the retailers are selling similar refurbished laptops for roughly equivalent prices. The retailers are located in different cities, but nothing else between the retailers appears to be much different.

You decide to visit the website of the retailer that has a physical retail store in Aspen, CO and discover that Aspen is about 1,710 miles from Florida State University and has a population of about 9,580.

Using the retailer’s homepage (shown below) and what you know about this retailer, please decide which of the laptop computers that you would prefer. After selecting the laptop of your choice, please submit your choice and proceed to the survey. Thank you again for your participation.

![Laptop Computer Purchase Scenario](image)

**Figure 3.8: Example Manipulation for Study 3 - Aspen**

**Manipulations.** The retailers’ websites were all the same, with exception of identification of the retailer’s physical location. A phrase appeared at the bottom of the homepage that read: “Click here for directions to our retail store in [CITY NAME].” No pictures of buildings or employees appeared on the sites. Aspen, CO and Niagara Falls, NY were selected as the familiar cities because results a pre-test with a separate group of undergraduate students (n = 98) indicated that they were more familiar than other locations (i.e., Penrose, CO and Rexford, NY –
all \( ps < .05 \) within the same states, and the actual geographic distances of the cities from the respondents’ university were very similar. Pre-testing also demonstrated that (1) Penrose, CO and Rexford, NY were of equal familiarity (\( p > .05 \)), (2) Aspen, CO and Niagara Falls, NY were of equal familiarity (\( p > .05 \)), and (3) both familiar cities were less familiar (\( ps < .01 \)) than the city in which the students’ university is located. The Aspen manipulation is shown in Figure 3.8.

Preliminary Analyses. The psychometric properties of the measures were again assessed using confirmatory factor analysis (CFA). All scales were simultaneously tested, with each item being allowed to load on only its respective factor. The results suggest that the measurement model offered good fit to the data (\( \chi^2 = 871.8; df = 491; CFI = .94; NNFI = .93; RMSEA = .06 \)). All variables exhibited sufficient construct reliability, and convergent and discriminant validity based on Fornell and Larcker’s (1981) criteria (see Table 3.13). Construct reliabilities ranged from .80 to .96. Manipulation checks indicated that approximately 83.90% of subjects recalled the correct experimental condition, leaving 172 cases suitable for analysis. Cell sizes ranged from 24 to 33. Manipulation checks confirmed that respondents in Study 3 were more familiar with Aspen, CO (\( M = 3.03 \)) and Niagara Falls, NY (\( M = 2.63 \)) than with Penrose, CO (\( M = 1.32 \)) or Rexford, NY (\( M = 1.15 \), all \( ps < .05 \)). The familiarity of Aspen and Niagara Falls was again statistically equivalent (\( p > .05 \)), as was the familiarity of Penrose and Rexford (\( p > .05 \)).

Results

To rule out the possible confound of State (i.e., CO vs. NY), a 2 (Familiar, Unfamiliar) x 2 (CO, NY) ANOVA was computed as the first step of the analysis. The second stage employed

| Study 3 Construct Reliabilities (c.r.), Average Variances Extracted (Diagonal), and Shared Variances |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Psychological Distance (PD) | .80 | .512 | REL | .871 | BEN | .689 | SR | .794 | PR | .832 | ES | .699 |
| Trust - Reliability (REL) | .96 | .371 | .871 | | | | | | | | | |
| Trust – Benevolence (BEN) | .87 | .379 | .661 | .689 | | | | | | | | |
| Service Responsiveness (SR) | .95 | .358 | .520 | .594 | .794 | | | | | | | |
| Problem Responsiveness (PR) | .95 | .423 | .554 | .614 | .674 | .832 | | | | | | |
| Expected Satisfaction (ES) | .87 | .443 | .639 | .623 | .590 | .677 | .699 | | | | | |
| Purchase Intentions (PI) | .89 | .174 | .334 | .239 | .269 | .264 | .476 | .737 | | | | |
| Product Knowledge (PK) | .94 | .004 | .021 | .046 | .022 | .033 | .028 | .000 | .792 | | | |
| Internet Concern (IC) | .84 | .021 | .000 | .002 | .000 | .000 | .000 | .004 | .644 | | | |

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a One-Way ANOVA to compare the group means of the retailers located in familiar and unfamiliar cities to the means of the control conditions (local retailer and IO retailer).

It was important to test for significant differences in the dependent measures across states in order to narrow the effects of familiarity to city alone. Thought listings indicated that two respondents in the Rexford, NY condition associated the location with New York City. Thus, although they had never heard of the city, they rated Rexford as very familiar and were therefore removed from the study. ANOVA results, shown in Table 3.14, indicate that State location did not affect any dependent measure. In addition, no Familiarity x State interaction qualified any of the results.

**Familiarity Effects.** The ANOVA results indicated significant main effects of location familiarity \( F(1,103) = 110.78, p < .001, \text{ partial } \eta^2 = .52 \) on psychological distance. LSD comparisons support H15; retailers in the unfamiliar cities were more psychologically distant \( (M = 7.51) \) than retailers in the familiar cities \( (M = 5.32, p < .001) \). As expected, the results were similar for reliability beliefs \( F(1,103) = 49.27, p < .001, \text{ partial } \eta^2 = .32 \) and benevolence beliefs \( F(1,103) = 92.53, p < .001, \text{ partial } \eta^2 = .47 \). The resulting mean differences were consistent with H16. Retailers located in familiar cities elicited greater reliability \( (M = 4.85) \) and benevolence \( (M = 4.99) \) beliefs than retailers located in the unfamiliar cities \( (Ms = 3.57, 3.68, ps < .001) \).

Results indicated a significant main effect of location familiarity on expected satisfaction \( F(1,103) = 61.02, p < .001, \text{ partial } \eta^2 = .37 \) and purchase intentions \( F(1,103) = 53.92, p < .001, \text{ partial } \eta^2 = .34 \). Comparisons revealed that the resulting means were in the hypothesized directions, supporting H17 and H18. Specifically, respondents had greater satisfaction expectations for retailers located in the familiar cities \( (M = 5.10) \) than for retailers located in the unfamiliar cities \( (M = 3.53, p < .001) \) and purchase intentions were higher for retailers located in familiar cities \( (M = 5.10) \) than for retailers located in unfamiliar cities \( (M = 4.88, p < .001) \).

Lastly, the effect of location familiarity also affected both service responsiveness \( F(1,103) = 54.75, p < .001, \text{ partial } \eta^2 = .35 \) and problem responsiveness inferences \( F(1,103) = 55.57, p < .001, \text{ partial } \eta^2 = .37 \). Again, mean differences were in the hypothesized directions, supporting H19. Retailers located in the familiar cities had superior responsiveness inferences both during
### Table 3.14: Study 3 F-Values and Partial Eta Square Statistics for the Effects of Location Familiarity

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>PD</th>
<th>REL</th>
<th>BEN</th>
<th>SR</th>
<th>PR</th>
<th>ES</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location Familiarity (FAM)</td>
<td>110.78&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.518</td>
<td>49.27&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.324</td>
<td>92.53&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.473</td>
<td>54.75&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>State (CO vs. NY)</td>
<td>0.84</td>
<td>.008</td>
<td>0.15</td>
<td>.001</td>
<td>0.01</td>
<td>.000</td>
<td>0.00</td>
</tr>
<tr>
<td>Loc Familiarity * State</td>
<td>1.76</td>
<td>.017</td>
<td>0.99</td>
<td>.010</td>
<td>0.47</td>
<td>.005</td>
<td>0.21</td>
</tr>
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</table>

#### Effects of Mediators on Dependent Variables (F-Values and Partial Eta Square Statistics)

<table>
<thead>
<tr>
<th>Mediators</th>
<th>REL</th>
<th>BEN</th>
<th>SR</th>
<th>PR</th>
<th>ES</th>
<th>PI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological Distance</td>
<td>49.55&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.327</td>
<td>124.41&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.549</td>
<td>59.32&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.368</td>
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<tr>
<td>Reliability</td>
<td>- - - -</td>
<td>162.32&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.614</td>
<td>100.64&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.497</td>
<td>319.92&lt;sup&gt;a&lt;/sup&gt;</td>
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<tr>
<td>Benevolence</td>
<td>- - - -</td>
<td>100.14&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.495</td>
<td>71.68&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.413</td>
<td>83.95&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Service Responsiveness</td>
<td>- - - -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>179.97&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.638</td>
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<tr>
<td>Problem Responsiveness</td>
<td>- - - -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>154.62&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.603</td>
</tr>
<tr>
<td>Expected Satisfaction</td>
<td>- - - -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
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</table>

#### Reduction in F-values of Location Familiarity Effects when Mediators are Covariates

<table>
<thead>
<tr>
<th>Mediators</th>
<th>ΔF</th>
<th>REL</th>
<th>ΔF</th>
<th>BEN</th>
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<th>SR</th>
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<th>PR</th>
<th>ΔF</th>
<th>ES</th>
<th>ΔF</th>
<th>PI</th>
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<tbody>
<tr>
<td>Psychological Distance (PD)</td>
<td>48.56&lt;sup&gt;a&lt;/sup&gt;</td>
<td>89.03&lt;sup&gt;a&lt;/sup&gt;</td>
<td>53.97&lt;sup&gt;a&lt;/sup&gt;</td>
<td>53.03&lt;sup&gt;a&lt;/sup&gt;</td>
<td>59.33&lt;sup&gt;a&lt;/sup&gt;</td>
<td>50.59&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Trust – Reliability (REL)</td>
<td>-</td>
<td>-</td>
<td>48.49&lt;sup&gt;1&lt;/sup&gt;</td>
<td>47.20&lt;sup&gt;1&lt;/sup&gt;</td>
<td>53.02&lt;sup&gt;1&lt;/sup&gt;</td>
<td>42.51&lt;sup&gt;1&lt;/sup&gt;</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Trust - Benevolence (BEN)</td>
<td>-</td>
<td>-</td>
<td>54.34&lt;sup&gt;2&lt;/sup&gt;</td>
<td>54.13&lt;sup&gt;2&lt;/sup&gt;</td>
<td>59.28&lt;sup&gt;2&lt;/sup&gt;</td>
<td>49.12&lt;sup&gt;2&lt;/sup&gt;</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Service Responsiveness (SR)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>54.56&lt;sup&gt;1&lt;/sup&gt;</td>
<td>43.69&lt;sup&gt;1&lt;/sup&gt;</td>
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<tr>
<td>Problem Responsiveness (PR)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>54.38&lt;sup&gt;1&lt;/sup&gt;</td>
<td>42.86&lt;sup&gt;1&lt;/sup&gt;</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Expected Satisfaction (ES)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>46.30&lt;sup&gt;1&lt;/sup&gt;</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Notes: η² = partial eta square  
<sup>a</sup>p < .001  
<sup>b</sup>p < .01  
<sup>c</sup>p < .05  
<sup>1</sup>partial mediation  
<sup>2</sup>full mediation
service delivery ($M = 5.00$) and in the event of problems ($M = 4.85$) than retailers located in the unfamiliar cities ($Ms = 3.76, 3.51, ps < .001$), and respondents had greater satisfaction expectations for retailers located in the familiar cities ($M = 5.10$) than for retailers located in the unfamiliar cities ($M = 3.53, p < .001$).

Control Conditions. One-Way ANOVA results yielded means for individual cities, as plotted in Figure 3.9. Psychological distance was lower for the local retailer ($M = 3.75$) than for retailers in both familiar and unfamiliar cities and the IO condition (all $ps < .001$). The means for reliability ($M = 5.91$), benevolence ($M = 5.78$), service and problem responsiveness ($M = 6.14, 6.04$), expected satisfaction ($M = 5.98$), and purchase intentions ($M = 6.10$) were higher for the local retailer than for all of the other groups (all $ps < .001$). Means for retailers in the two familiar cities (i.e., Aspen and Niagara Falls) were statistically equivalent for all dependent variables and there was also no difference in mean responses across the retailers in the unfamiliar cities (i.e., Penrose and Rexford). However, the unfamiliar cities did not outperform the Internet-only retailer on any dependent factor (all $ps > .05$). Thus, the mere presence effect identified in Study 1 was indeed attenuated when the retailer was located in an unfamiliar physical location.

![Figure 3.9: Study 3 Means Plots (One-Way ANOVA)](image-url)
Table 3.15: Study 3 One-Way ANOVA Results and Resulting Means (Effects of Location Familiarity)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>F (partial η²)</th>
<th>Local Aspen, CO</th>
<th>Local Niagara Falls, NY</th>
<th>Local Penrose, CO</th>
<th>Local Rexford, NY</th>
<th>Local Internet-Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psych. Distance</td>
<td>55.15 (.624)</td>
<td>3.75</td>
<td>5.36</td>
<td>5.28</td>
<td>7.28</td>
<td>7.75</td>
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<tr>
<td>Reliability Beliefs</td>
<td>29.22 (.468)</td>
<td>5.91</td>
<td>4.80</td>
<td>4.91</td>
<td>3.70</td>
<td>3.45</td>
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<tr>
<td>Benevolence Beliefs</td>
<td>40.26 (.548)</td>
<td>5.78</td>
<td>4.95</td>
<td>5.03</td>
<td>3.74</td>
<td>3.63</td>
</tr>
<tr>
<td>Service Responsiveness</td>
<td>28.60 (.463)</td>
<td>6.14</td>
<td>4.97</td>
<td>5.04</td>
<td>3.80</td>
<td>3.72</td>
</tr>
<tr>
<td>Problem Responsiveness</td>
<td>29.85 (.473)</td>
<td>6.04</td>
<td>4.76</td>
<td>4.93</td>
<td>3.56</td>
<td>3.27</td>
</tr>
<tr>
<td>Satisfaction Expectation</td>
<td>34.01 (.506)</td>
<td>5.98</td>
<td>4.78</td>
<td>4.98</td>
<td>3.66</td>
<td>3.42</td>
</tr>
<tr>
<td>Purchase Intentions</td>
<td>30.15 (.476)</td>
<td>6.10</td>
<td>5.01</td>
<td>5.20</td>
<td>3.92</td>
<td>3.43</td>
</tr>
</tbody>
</table>

η² = partial eta square
* p < .001

Table 3.16: Pair-wise Comparisons for Means of Cities Used in Study 3 for Significance of Mean Differences

<table>
<thead>
<tr>
<th>Location (i)</th>
<th>Location (j)</th>
<th>PD p (i – j)</th>
<th>REL p (i – j)</th>
<th>BEN p (i – j)</th>
<th>SR p (i – j)</th>
<th>PR p (i – j)</th>
<th>ES p (i – j)</th>
<th>PI p (i – j)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet-Only</td>
<td>Penrose, CO</td>
<td>.572</td>
<td>.469</td>
<td>.853</td>
<td>.574</td>
<td>.600</td>
<td>.614</td>
<td>.475</td>
</tr>
<tr>
<td></td>
<td>Rexford, NY</td>
<td>.353</td>
<td>.831</td>
<td>.471</td>
<td>.369</td>
<td>.374</td>
<td>.138</td>
<td>.301</td>
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<tr>
<td></td>
<td>Aspen, CO</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Niagara Falls, NY</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>Local Retailer</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Penrose, CO</td>
<td>Rexford, NY</td>
<td>.168</td>
<td>.831</td>
<td>.623</td>
<td>.761</td>
<td>.742</td>
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</tr>
<tr>
<td></td>
<td>Aspen, CO</td>
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<td>.000</td>
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<td>.000</td>
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<tr>
<td></td>
<td>Niagara Falls, NY</td>
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<td>Local Retailer</td>
<td>.000</td>
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<td>.000</td>
</tr>
<tr>
<td>Rexford, NY</td>
<td>Aspen, CO</td>
<td>.000</td>
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<tr>
<td></td>
<td>Niagara Falls, NY</td>
<td>.000</td>
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<tr>
<td></td>
<td>Local Retailer</td>
<td>.000</td>
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<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Aspen, CO</td>
<td>Niagara Falls, NY</td>
<td>.776</td>
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<td>.693</td>
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<td>.328</td>
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<tr>
<td></td>
<td>Local Retailer</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Niagara Falls, NY</td>
<td>Local Retailer</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

Mediation. The mediation path tested in Studies 1 and 2 was also hypothesized in this study. ANOVA results supporting H15 thru H19 met the first requirement for mediation (Baron and Kenny 1986). ANCOVAs were again performed such that F-values related to location familiarity effects could be compared to the F-values of these effects when each mediator was considered as a covariate. All proposed mediators had significant effects on the designated dependent factors and analyses showed that all of the F-values associated with location
familiarity effects were substantively reduced when mediators were considered as covariates. Specifically, Table 3.14 shows that location familiarity effects were reduced when psychological distance ($\Delta F_s = 50.59$), reliability ($\Delta F = 42.51$), benevolence ($\Delta F = 49.12$), service and problem responsiveness ($\Delta F_s = 43.69, 42.86$), and satisfaction expectations ($\Delta F = 46.30$) were added as covariates in the purchase intentions outcome model. Location familiarity also affected expected satisfaction via psychological distance ($\Delta F = 59.33$), reliability ($\Delta F = 53.02$), benevolence ($\Delta F = 59.28$), and service/problem responsiveness, ($\Delta F = 54.56, 54.38$). Psychological distance, reliability beliefs and benevolence beliefs, respectively, were shown to mediate the path from location familiarity to service responsiveness ($\Delta F_s = 53.97, 48.49, 54.34$) and problem responsiveness ($\Delta F_s = 53.03, 47.20, 54.13$). Lastly, psychological distance mediated paths from location familiarity to reliability ($\Delta F = 48.56$) and benevolence beliefs ($\Delta F = 89.03$).

**Study 3 Discussion**

The goals of the third study were (1) to examine whether or not retailers in familiar geographic locations were preferred over retailers in unfamiliar locations, (2) to explain these results with consumers’ perceptions of psychological distance, and (3) to provide empirical support that the operationalization of psychological distance is not merely an artifact of the geographic distance manipulations used in the first two studies. Results of Study 3 show that retailers in familiar locations do have marketing advantages over retailers in unfamiliar locations. These advantages manifest themselves in higher trust beliefs, responsiveness inferences, satisfaction expectations, and purchase intentions. Study 3 demonstrates that for unknown retailers, these effects can be attributed to the lower psychological distance that consumers perceive of retailers in familiar locations. Further, when geographic distance is held constant across non-local locations, psychological distance was lower for retailers with familiar locations.
CHAPTER 4
SUMMARY AND MANAGERIAL AND RESEARCH IMPLICATIONS

The primary objectives of this research were to extend the e-commerce literature by (1) providing an empirically supported theoretical explanation of the effects of physical channel presence on marketing outcomes, (2) examining factors that may place boundary conditions on the application of psychological distance theory or provide further generalizability thereof, and (3) identifying replicable characteristics of a physical channel location that would benefit online retailers. Although several theories were used in developing this research, the psychological distance theory provided the basis for the present inquiry. Study 1 examined the basic tenets of psychological distance theory by comparing local retailers with retailers located at great distances from consumers and retailers with no physical stores. Study 2 employed media depicting retailers’ physical and human assets in an attempt to mitigate the competitive advantages afforded by proximal retail presence. Then, Study 3 held distance constant across retailer locations to examine a location characteristic (i.e., familiarity) that was proposed to affect psychological distance perceptions independent of actual geographic distance.

Consistent with psychological distance theory, Study 1 found that consumers perceived local retailers to be less psychologically distant than their non-local counterparts, and that Internet-only retailers were construed to be even more psychologically distant, presumably due to their lack of physical space. Effects on marketing outcomes were consistently in the opposite direction of the psychological distance results, with consumers again favoring local hybrid retailers over distant hybrid retailers, and distant hybrids over Internet-only firms. A mere presence effect was also identified in Study 1, suggesting that online retailers can obtain marketing benefits by operating a physical retail location, even if the location is a great distance from the consumer. However, the mere presence effect was not strong enough to level the playing field for non-local hybrid firms in comparison to local hybrids.

Study 2 replicated the effects identified in Study 1 with a more comprehensive measure of psychological distance and further demonstrated that pictures placed on the website that convey tangible images of the firm can be used to reduce psychological distance and improve marketing outcomes for Internet-only retailers and non-local hybrids, but that such media generally had null effects for a retailer located in same city as the consumer (see Tables 3.11, 3.12, and Figure 3.7). Overall, the less psychologically distant a retailer was without the media
content, the smaller the effects of the media were on further reducing psychological distance perceptions.

Study 3 finds that consumers’ familiarity with a retailer’s location reduces psychological distance and that retailers in familiar locations have marketing advantages over retailers in less familiar locations. Overall, results suggest that consumers’ knowledge of an unknown retailer’s location is integrated into their decision-making framework. In addition, follow-up comparisons showed that an unfamiliar location offers no additional benefit over an Internet-only presence. Thus, the mere presence effect identified in the first two studies is shown to have limitations in that the benefits of a retailer’s physical presence is enabled by a familiar location, and seemingly mitigated when the consumer is not familiar with the location. In essence, unless the location is familiar, consumers may construe the retailer to exist in the same “hypothetical somewhere” location as an Internet-only retailer.

Overall, these studies add to the existing literature by showing that the existence and location of the retail store is an important consideration for hybrid retailers in initial encounters when the consumer has little or no previously knowledge of the firm. Related research has shown that physical presence is important for building trust and increasing purchase intentions for unbranded firms and those with no track record of customer satisfaction (Benedicktus et. al 2008). This research extends such findings to include a broader set of marketing outcomes, demonstrating that physical store presence also affects service and problem responsiveness inferences, and satisfaction expectations. The research also adds geographic distance to the physical presence research framework and investigates factors that retailers can use to circumvent the general inhibiting effects of spatial distance, namely media emphasizing tangible features and a familiar retail location. In sum, the findings suggest that consumers seek a familiar context in which to transact online transactions. Important contexts that emerged in this research were (1) retail presence in the physical environment, (2) retail presence within close geographic proximity, (3) evidence of tangible features, and (4) retail presence in a familiar location.

Managerial Implications

Past research indicates that managers initially sell their goods or internationalize to psychologically proximal locations and then move to more distant locales (Leonidou and Katsikeas 1996). Anecdotal evidence suggests that consumers may follow a similar pattern
when progressing from amateur to experienced Internet buyers. That is, consumers may purchase initially at the website of hybrid firms with which they are familiar from the offline purchase environment and then become less discerning over time (Vara and Mangalindan 2006). Study 1 suggests that when an Internet consumer is considering a purchase from an unknown retailer, the retailer’s physical channel presence and geographic distance can play an important role in decision-making. Thus, consumers may transition from buying from well-known and local retailers to a broader set of online retailers and in doing so will likely search first for retailers that can convey themselves to be more psychologically proximal and thus, may be better suited as successful relationship partners. Studies 2 and 3 demonstrate that online retailers can reduce psychological distance by emphasizing tangible features and locating in familiar cities.

This research shows that a local store presence is overwhelmingly preferred to non-local and Internet-only retailers. However, implementation of strategies that leverage this advantage is limited because it is likely not possible for retailers to have a physical location that is local to all consumers. Furthermore, the unknown retailers that are likely to benefit from psychological distance reducing strategies are conceivably not retailers with the financial capacity to invest in stores in every locale. Thus, these retailers should attempt to reduce psychological distance perceptions by emphasizing physical presence information. Specifically, although consumers certainly understand that Internet retailers have some physical features, many online firms seem hesitant to disclose their physical locations. By not doing so, the retailer is making a choice to exist in hypothetical space and thereby erecting a psychological barrier between themselves and potential customers. Logically, if 71% of Internet consumers specifically seek physical presence information in initial encounters with a company (IC3 2003), then online retailers need to make the information more accessible.

After emphasizing its presence in the physical environment, retailers are confronted with the inhibitor of geographic distance. The present research suggests that media can be used to attenuate this effect by increasing tangibility-based associations. Specifically, retailer websites should highlight service environments and employees. In addition to a mere photo of the exterior facility, other cues like virtual tours of stores or interactive product displays could be used to engage consumers and to build tangible associations with the retailer. Beyond snapshots of employees, retailers could use media to underscore key service processes (e.g., employees packaging products for shipment to the online consumer, in-store interactions with offline
Moreover, hybrid retailers may first attempt to increase familiarity with their existing locations and then consider location familiarity among the criteria when expanding. Maps that illustrate retail locations beyond the local municipality can give consumers more detailed information about the retailer’s existence in a geographic space that includes the consumer’s field of knowledge. For example, like Hobby Craft and Knecht’s Auto Parts (hobbycraft.co.uk, knechts.com), Blue Ridge Mountain Sports (brms.com) formerly had a regional map of its 13 locations in several Mid-Atlantic States. In recent years, BRMS has updated its website as technology has changed and now uses Google’s business mapping service. This enables the retailer to provide location information for as broad or precise a region as desired by the consumer and encourages visitation via the conveniently accessed store directions.

As hybrid retailers select locations for expansion or Internet-only retailers consider establishing a physical retail presence, location familiarity should be considered. For example, when Apple entered the traditional marketplace, the company invested first in stores located in the most well-known cities and gradually grew into less populous cities. Beyond the size benefits of local population, such a strategy could be influential in attracting non-local customers. Retailers should conduct research to establish the relative familiarity of locations among their non-local target markets and weigh the benefits of added trustworthiness beliefs, service inferences, satisfaction expectations, and purchase intentions with the relative cost of real estate among the prospective locations.

The theories applied in this dissertation (i.e., psychological distance, protection-motivation) also suggest that managers could reduce psychological distance by encouraging more frequent visits to the firm’s website, by educating consumers regarding firm characteristics (e.g., store intensity, location, number of employees, longevity, etc.), and communicating the firm’s participation in activities in which its target customers are similarly engaged. For example, de Laat (2005) suggests that an individual’s virtue may be represented by membership in a socially acceptable organization (i.e., a church). However, wide variance in the religious beliefs of consumers would conceivably make philanthropic causes better-suited affiliations for businesses. Psychological distance in this sense may be reduced via the social similarity as is commonly considered in the relationship and international business literatures.

Limitations and Future Directions
While these three studies have important implications for multi-channel retailing strategy, they are not without limitations. For example, past research in the multi-channel, relationship marketing, and psychological distance literatures suggested that information regarding online retailers’ physical presence would be primarily beneficial for unknown firms. More specifically, physical channels have been shown to be less important for familiar brands. Brand familiarity reduces the need for the physical presence cue because familiarity with the brand reduces psychological distance via auxiliary associations. Moreover, psychological distance and initial trust beliefs are most relevant in a consumer’s first encounter with a firm. For these reasons, the present studies focused on psychological distance and trust beliefs of relatively unknown retailers. Further application of psychological distance theory in consumer research should seek to substantiate this logic with empirical evidence showing brand familiarity reduces psychological distance.

Secondly, the non-local hybrid retailer manipulations in the first two studies were limited to 500 and 1500-miles from the consumer. It would be interesting to establish a more concrete radius for what consumers construe to be a local retail area. For example, results may have been different if the non-local hybrid was located 25, 50, or even 100 miles from the consumer. Furthermore, these studies considered only refurbished laptop computers as a product category. There may be product categories for which consumers’ concern with geographic distance would be alleviated or heightened. Price, complexity, and general availability of the product in the marketplace may hold implications for the importance of a local retail presence.

In Study 3, the “familiar” locations selected for use in the experiment were both less familiar than the local city. Thus, in light of the results, it was not surprising to find that the retailers in these cities were also more psychologically distant. Cities that are just as familiar as the local city could be used in future research to further this stream of research. It is also likely that consumers associate some cities with particular product classes (e.g., tech products: Austin, TX, Palo Alto, CA, New York City, NY, or Portland, OR). Such associations may outweigh the familiarity and proximity of a local retail location.

Future research might also examine the media contents proposed to retailers in the discussion of managerial implication (i.e., virtual tours, product displays, employees performing service delivery tasks, and employee characteristics). These contents may reduce psychological distance and increase trust by enhancing tangibility perceptions and enabling construal of the
retailer’s physical and/or human attributes. Characteristics of the retailer’s physical facilities and/or employees may also affect consumer perceptions and trusting beliefs. For example, facility size and aesthetic appeal, as well as employee competence, could be illustrated in this manner. Similarly, shared values, such as altruism, openness, concern for others, sincerity, and philanthropy could easily be conveyed by media on a retailer’s website. Also, other types of firm-related information beyond location could be used to increase consumer knowledge with a retailer, such as number of employees, number of locations, or longevity.

Other studies could focus on social cueing techniques available for all online retailers. Specifically, there is currently a focus on research linking social responsibility of firms to customer perceptions. Media depicting the employees of an IO or hybrid retailer may be similarly capable of reducing psychological distance via the social component of distance perceptions. The mere presence/absence of such media may mitigate some of the psychological distance between IO and hybrid firms. However, there may be differences in the effectiveness of such media. For example, displaying media related to employee participation in a one-time event might be characterized differently than media encouraging others to get involved in a program in which the retailer also participates. Similarly, the extent of the firm’s social involvement may be an important interacting factor. Many websites (BestBuy.com, PierOne.com) communicate ongoing involvement of the firm in socially responsible activities. However, other retailers (e.g., winecountrygiftbaskets.com) do not share any such information. These differences may hold implications for reducing social distance and influencing psychological distance perceptions of Internet retailers.

CONCLUSION

This dissertation introduces the concept of psychological distance to the Internet marketing literature and discusses the role of consumer learning in initial stages of relationship development. Online retailers’ physical presence attributes are shown to be influential in reducing psychological distance and developing initial trust beliefs, which in turn have implications for consumers’ service inferences, satisfaction expectations, and purchase intentions. Overall, it appears that consumers seek contextual cues that provide a structure necessary for forming expectations and beliefs. This familiar context is available when a retailer highlights its physical location, human attributes, or exists in a geographic location with which the consumer has prior knowledge.
REFERENCES


Ha, Hong-Youl and Helen Perks (2005), Effects of Consumer Perceptions of Brand Experience on the Web: Brand Familiarity, Satisfaction, and Brand Trust, *Journal of Consumer Behavior*, 4 (6), 438-452


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Vahlne, Jan-Erik and Finn Wiedersheim-Paul (1977), *Psychic Distance – An Inhibiting Factor in International Trade*. Department of Business Administration, University of Uppsala.


# APPENDIX A

## SUMMARY OF RESULTS

### Study 1

<table>
<thead>
<tr>
<th>Prediction</th>
<th>Result</th>
</tr>
</thead>
</table>
| H1 Location $\rightarrow$ Psychological Distance | Local $<$ Hybrids, $p < .05$  
Hybrids $<$ IO, $p < .001$ |
| H2 Location $\rightarrow$ Reliability | Local $>$ Hybrids, $p < .05$  
Hybrids $>$ IO, $p < .05$ |
| Location $\rightarrow$ Benevolence | Local $=$ Hybrids, $p > .05$  
Hybrids $>$ IO, $p < .05$ |
| H3 Location $\rightarrow$ Purchase Intentions | Local $>$ Hybrids, $p < .05$  
Hybrids $>$ IO, $p < .05$ |
| H4 Location $\rightarrow$ Satisfaction Expectations | Local $>$ Hybrids, $p < .05$  
Hybrids $>$ IO, $p < .001$ |
| H5 Location $\rightarrow$ Responsiveness | Local $>$ Hybrids, $ps < .05$  
Hybrids $>$ IO, $ps < .05$ |

#### H6 Trust, Responsiveness, ESAT are mediators of LOC $\rightarrow$ PI

- Trust partially mediates LOC $\rightarrow$ PI
- Responsiveness and ESAT fully mediate LOC $\rightarrow$ PI

#### H7 Trust, Responsiveness are mediators of LOC $\rightarrow$ ESAT

- Trust partially mediates LOC $\rightarrow$ ESAT
- Responsiveness fully mediates LOC $\rightarrow$ ESAT

#### H8 Psychological Distance mediates LOC $\rightarrow$ TR, RESP, ESAT, PI

- Full Mediation of PD on LOC $\rightarrow$ Trust
- Partial Mediation on LOC $\rightarrow$ RESP, ESAT, and PI.

### Study 2

<table>
<thead>
<tr>
<th>Prediction</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H9 Buildings, Employee Pics $\rightarrow$ PDist</td>
<td>With Pictures $&lt;$ No Pictures, $ps &lt; .05$</td>
</tr>
<tr>
<td>H10 Buildings, Employee Pics $\rightarrow$ TR</td>
<td>With Pictures $&gt;$ No Pictures, $ps &lt; .05$</td>
</tr>
<tr>
<td>H11 Buildings, Employee Pics $\rightarrow$ PI</td>
<td>With Pictures $&gt;$ No Pictures, $ps &lt; .05$</td>
</tr>
<tr>
<td>H12 Buildings, Employee Pics $\rightarrow$ ESAT</td>
<td>With Pictures $&gt;$ No Pictures, $ps &lt; .05$</td>
</tr>
<tr>
<td>H13 Buildings, Employee Pics $\rightarrow$ RESP</td>
<td>With Pictures $&gt;$ No Pictures, $ps &lt; .05$</td>
</tr>
</tbody>
</table>

**H14** Effects of Media on DVs attenuated when firm in hybrid or local

- $ps < .001$ for IO,
- $ps < .05$ for Non-local hybrid,
- $ps > .05$ for Local

#### Other

- Building * Employee Pictures
- Picture effects not additive on any dependent measure

#### Local Store Pairwise Comparisons

- Local w/o Pics $>$ Non-Local w/o Pics $>$ IO w/o Pics
- Local w Pics $=$ Non-Local w Pics $=$ IO w Pics

### Study 3

<table>
<thead>
<tr>
<th>Prediction</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H15 Unfamiliarity/Familiarity $\rightarrow$ PD</td>
<td>Unfamiliar $&gt;$ Familiar, $p &lt; .001$, Unfamiliar $=$ IO, $p &gt; .05$</td>
</tr>
<tr>
<td>H16 Unfamiliarity/Familiarity $\rightarrow$ TR</td>
<td>Unfamiliar $&lt;$ Familiar, $p &lt; .001$, Unfamiliar $=$ IO, $p &gt; .05$</td>
</tr>
<tr>
<td>H17 Unfamiliarity/Familiarity $\rightarrow$ ESAT</td>
<td>Unfamiliar $&lt;$ Familiar, $p &lt; .001$, Unfamiliar $=$ IO, $p &gt; .05$</td>
</tr>
<tr>
<td>H18 Unfamiliarity/Familiarity $\rightarrow$ PI</td>
<td>Unfamiliar $&lt;$ Familiar, $p &lt; .001$, Unfamiliar $=$ IO, $p &gt; .05$</td>
</tr>
<tr>
<td>H19 Unfamiliarity/Familiarity $\rightarrow$ RESP</td>
<td>Unfamiliar $&lt;$ Familiar, $p &lt; .001$, Unfamiliar $=$ IO, $p &gt; .05$</td>
</tr>
</tbody>
</table>

#### H20 Mediation Model Replication

- Mediation results confirm path of LOC $\rightarrow$ PD $\rightarrow$ TR $\rightarrow$ RESP $\rightarrow$ ESAT $\rightarrow$ PI

#### H21 Note

- LOC = Retailer Location, PD = Psychological Distance, TR = Trust, RESP = Responsiveness, ESAT = Expected Satisfaction, PI = Purchase Intentions, Pics = Pictures
APPENDIX B

HUMAN SUBJECTS APPROVAL MEMORANDUM

Office of the Vice President For Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673. FAX (850) 644-4392

APPROVAL MEMORANDUM

Date: 5/14/2007

To: Ray Benedicktus

Address: 1110
Dept.: MARKETING

From: Thomas L. Jacobson, Chair

Re: Use of Human Subjects in Research
PSYCHOLOGICAL DISTANCE OF VIRTUAL AND PHYSICAL STORE LOCATIONS

The application that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be Expedited per 45 CFR § 46.110(7) and has been approved by an expedited review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If you submitted a proposed consent form with your application, the approved stamped consent form is attached to this approval notice. Only the stamped version of the consent form may be used in recruiting research subjects.

If the project has not been completed by 5/12/2008 you must request a renewal of approval for continuation of the project. As a courtesy, a renewal notice will be sent to you prior to your expiration date; however, it is your responsibility as the Principal Investigator to timely request renewal of your approval from the Committee.

You are advised that any change in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report, in writing any unanticipated problems or adverse events involving risks to research subjects or others.
By copy of this memorandum, the Chair of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is IRB00000446.

Cc: Michael Brady, Advisor
HSC No. 2007.432
APPENDIX C

INFORMED CONSENT LETTER

This request for participation was emailed to students enrolled in marketing classes at FSU. This email contains the same content as the Informed Consent form, with the addition of instructions for accessing the study.

My name is Ray Benedicktus. I am a graduate student under the direction of Professor Michael Brady in The College of Business at Florida State University. We are requesting your participation in a short study, which will involve your consideration of products on a retailer’s web site and completion of a short survey. The purpose of this study is to gain knowledge in the area of consumer marketing.

Participation in the study will take about 15 minutes. Your participation in this study is completely voluntary. Choosing not to participate will have no adverse consequences and you can choose to withdraw from the study at any time.

The questionnaire is anonymous. The results of the study may be published but your name will not be known. All information obtained during the course of the study will remain confidential, to the extent allowed by law.

If you have any questions or concerns, please feel free to contact either me at 850-644-4417 or at rlb04d@cob.fsu.edu, Dr. Michael Brady at 850-644-7853 or mbrady@cob.fsu.edu, or Florida State University's Human Subjects Committee Hotline at 850-644-8836.

Return of the questionnaire will be considered your consent to participate. You can access the study by clicking the following link or pasting the URL into your web browser.

http://www.websurveysolutions.com/1295862358

Thanks in advance for your participation,

Ray L. Benedicktus
Ph.D. Candidate
BIOGRAPHICAL SKETCH

Ray L. Benedicktus, III earned a Bachelor of Science in marketing in 2000 and a Master’s of Business Administration with a management concentration in 2003 from Fayetteville State University in North Carolina. Between degree programs Ray worked at MetLife Insurance marketing financial products to individuals and families and assisting small business owners in establishing and funding employee benefit plans.

In the first year of Fayetteville State University’s MBA program, Ray gained invaluable management experience as the first general manager recruited by Domino’s Pizza directly into a corporate store from outside the Domino’s organization. At Domino’s, Ray managed day-to-day restaurant operations including local store marketing, sales building, and managing a team of 23 employees. Within a year of hire, Ray exceeded his store sales record six times, reduced service delivery times for his store by 30%, and generated the highest area sales increases for three consecutive quarters.

Ray also worked as a small business consultant during the latter part of his MBA program. In this role, Ray worked with clients of a non-profit economic development center funded by the Small Business Administration, helping entrepreneurs navigate the start-up process and advising business owners on marketing, management, and financial issues. Ray also developed strategic plans, guided clients through the capitalization process, developed materials for teaching business planning and marketing courses and wrote grants for center funding.

In 2004, Ray was asked to teach a small business management course at Fayetteville State University and subsequently pursued a doctorate degree at Florida State University. At Florida State University, Ray published his research in numerous conference proceedings, including the Academy of Marketing Science, Winter AMA, AMA Public Policy, Advertising and Consumer Psychology, and Society for Marketing Advances conferences. In addition, Ray and his colleagues were invited to develop a book chapter discussing new evidence and future research directions in the domain of multi-channel retailing. This book chapter was based in part on a Ray’s published work in the Journal of Interactive Advertising and additional working papers, currently under advanced review at top marketing journals.