

PERCEPTIONS OF RETAIL CONVENIENCE FOR IN-STORE AND ONLINE SHOPPERS

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Shoppers seek convenience in different shopping situations; however, marketers know very little about the types of convenience that retailers offer and the types of convenience that consumers value. In this study, perceptions of retail convenience are examined across two popular shopping formats—traditional, brick-and-mortar stores and online shopping. Items measuring the retail convenience dimensions of access, search, transaction, and possession were constructed. Data were collected using both a convenience sample and a national online panel. Results indicate that retail convenience is a higher-order construct consisting of four distinct dimensions—access, search, transaction, and possession. Testing of hypotheses detailing retail convenience perceptions among in-store and online shoppers reveal that online shoppers have more favorable perceptions of access convenience, search convenience, and transaction convenience than in-store shoppers. The results detail consumer perceptions of convenience regarding in-store and online shopping. In addition, this research reveals the importance of the different dimensions of retail convenience in constructing an overall convenience strategy.

INTRODUCTION

“Lost time is never found again.” ~ Benjamin Franklin (1743)

Foote (1963) characterized the consumer of the future (in the year 2000) as one whose primary constraints are no longer money, but time and learning. Retailers have encountered a new type of consumer—one who considers the resource of time as valuable as money (if not more valuable). Because today’s consumer is more time-starved than ever, it is appropriate to carefully consider the benefit of convenience to consumers as a concept of utmost importance.

In this study, consumer perceptions of retail convenience are evaluated across two different retail formats—traditional, brick-and-mortar stores and online stores. Retail convenience is defined as consumers’ time and effort costs associated with shopping in a retail environment (Seiders, Berry and Gresham 2000). The consumer resources of time and effort are described in the marketing literature

as non-monetary costs influencing shopping behavior (Bender 1964; Herrmann and Beik 1968). While shopping, consumers spend time and effort to complete multiple tasks. Some tasks, such as selecting a retailer, searching for product information, locating the product they wish to buy, comparison shopping, and completing the checkout process, are performed whether the customer shops online or at a traditional outlet. Tasks specific to shopping at a traditional store include selecting a retail location, traveling to the location, searching for a parking spot, and moving through the store. When shopping online, customers often spend time and effort locating a website, waiting for the web pages to load, navigating the website, and waiting for their purchase to be delivered. So whether consumers choose to shop online or in a traditional store, time and effort costs are inherent to the process of shopping.

While shoppers who are more rationally or economically motivated seek convenience in different shopping situations, we know little about the various types of convenience that retailers offer their customers. Seiders, Berry and Gresham (2000) propose four dimensions of convenience particularly relevant to retailers: access, search, transaction, and possession

convenience. To what extent do consumers seek these types of convenience when shopping? How do customer perceptions of retail convenience vary across different shopping formats? How can retailers benefit from a better understanding of what convenience means to their customers? This study provides a framework for addressing many of these important questions.

The primary purpose of this paper is to provide an examination of perceptions of retail convenience for both in-store and online shoppers. Armed with this new knowledge, retailers will be able to better understand how to meet customers' needs, thus improving customer satisfaction. First, a review of the literature relevant to retail convenience is presented. Then, five hypotheses related to customer perceptions of retail convenience are developed and tested. Next, the results of hypothesis testing are discussed. Implications for retailers and directions for future research are also provided.

LITERATURE REVIEW AND DEVELOPMENT OF HYPOTHESES

The Evolving Nature of Convenience

The concept of convenience first appeared in the marketing literature with Copeland's (1923) classification of goods. Copeland suggests that by classifying goods according to his tripartite structure (convenience, shopping, or specialty goods), marketers can determine the type of store in which the product should appear and the appropriate concentration of distribution. Convenience goods are those lower-priced goods which consumers are familiar with and which are purchased from easily accessible outlets. Gardner (1945, p. 275) provides this description, based primarily on how the consumer shops for this type of good:

Convenience goods are articles of daily purchase...which are insignificant in value or are needed for immediate use. These goods are, to a considerable extent, bought at the most convenient place without a comparison of values....

As marketers continued to develop other product classification systems, convenience goods remained an essential staple, reappearing in several other schemata (Bucklin 1963; Kaish 1967; Holbrook and Howard 1977; Enis and Roering 1980; Murphy and Enis 1986). Thus, the initial use of the word "convenience" in the marketing literature was as an adjective describing a class of consumer goods. Researchers have conducted studies covering the vast domain of convenience goods, including convenience foods (e.g., frozen dinners, ready-to-eat cold cereals, fast-food restaurants) (Crist 1960; Anderson 1972; Reilly 1982; Darian and Cohen 1995), convenience time-saving durables (e.g., dishwashers, microwave ovens, washers and dryers) (Anderson 1972; Reilly 1982), and time-saving services (e.g., child care, house cleaning services, lawn care services) (Brown 1990).

Over time, the use of the word "convenience" changed from a descriptor of products into its own unique concept—one with an emphasis on time buying or time savings (Yale and Venkatesh 1986). Many researchers (Douglas 1976; Strober and Weinberg 1977, 1980; Schaninger and Allen 1981; Reilly 1982) facilitated this transition by hypothesizing that consumers with greater time constraints are more likely to use convenience products and services to save time (Yale and Venkatesh 1986). As a result of this evolution of meaning, the more complete definitions of convenience now contain one common element—the reduction of non-monetary costs associated with a product (Kelley 1958; Kotler and Zaltman 1971; Etgar 1978; Wolfinbarger and Gilly 2001; Rohm and Swaminathan 2004).

The Multidimensional Nature of Convenience

Researchers taking a closer look at the concept of convenience describe it as a multidimensional construct (Yale and Venkatesh 1986; Brown 1989, 1990; Seiders, Berry and Gresham 2000; Berry, Seiders and Grewal 2002), or as a second-order construct

consisting of various types of time and effort costs (Berry, Seiders and Grewal 2002; Seiders *et al.* 2005; Seiders *et al.* 2007). To provide a better understanding of convenience, researchers in this area have distinguished between different types of convenience. Service convenience (Berry, Seiders and Grewal 2002) and retail convenience (Seiders, Berry and Gresham 2000) are two types of convenience, which have appeared recently in the marketing literature.

Service convenience, defined as a "consumer's time and effort perceptions related to buying or using a service" (Berry, Seiders and Grewal 2002, p. 1), includes the dimensions of access, decision, transaction, benefit, and post-benefit convenience. This type of convenience is unique since these time and effort expenditures occur at different points during the service encounter. Recently, Seiders *et al.* (2007) developed a scale to measure service convenience (SERVCON), examining it in a nomological network.

In 2000, Seiders, Berry and Gresham introduced a different type of convenience—retail convenience. Retail convenience is defined as consumers' time and effort costs associated with shopping in a retail environment. Seiders, Berry and Gresham

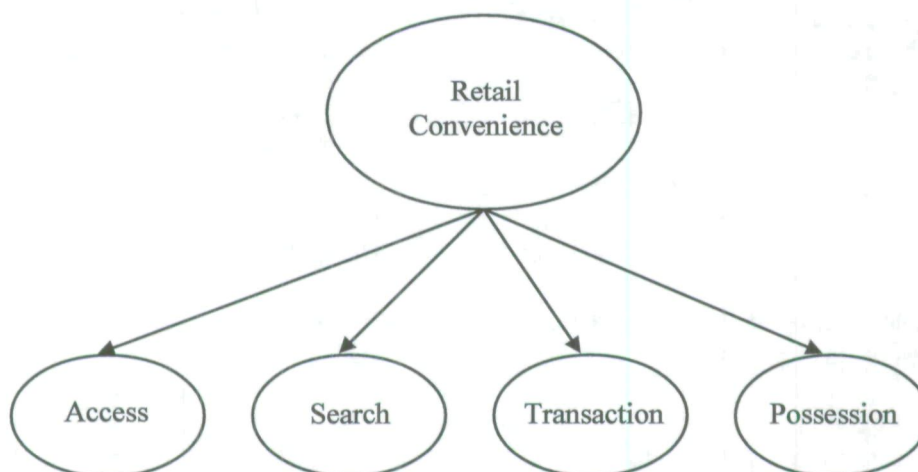
(2000) propose four distinct dimensions of convenience relevant to retailers: access, search, possession, and transaction. Although access and transaction are dimensions common to both service convenience and retail convenience, search and possession convenience are specific types of convenience more applicable to retailing. Each dimension is discussed in more detail shortly.

While the dimensions of service convenience have only begun to be examined empirically (Seiders *et al.* 2007), retail convenience has yet to receive empirical testing. As such, the first hypothesis relates to the structure of retail convenience for in-store and online shoppers. Remaining consistent with previous researchers who view convenience as a multidimensional construct, Hypothesis 1 states:

H₁: Retail convenience is a higher-order multidimensional construct containing four dimensions: access, search, transaction, and possession.

Figure 1 contains the higher-order factor model to be tested in this study. Since this research focuses on retail convenience, a detailed description of the dimensions of retail convenience is now provided. Hypotheses related to each dimension are also presented.

FIGURE 1
Retail Convenience for In-Store and Online Shoppers



Access convenience is defined as "the speed and ease with which consumers can reach a retailer" (Seiders, Berry and Gresham 2000, p. 81). This access may occur in person, over the phone, through a computer, or in other ways. Access convenience is an extremely important dimension of retail convenience, because if the consumer cannot reach the retailer, then the consumer would never be given the opportunity (on that particular shopping attempt) to make a decision, to complete a transaction, or to possess the desired product.

Consumer decision making is significantly influenced by both the speed and ease with which consumers can make contact with retail outlets. A "convenient location" is viewed as a place that minimizes the overall travel cost to the consumer (Jones, Mothersbaugh and Beatty 2003). Traditional retailers may improve access convenience by operating from a location that is easy to get to, near to most consumers, and near to other frequently visited stores (Seiders, Berry and Gresham 2000). Online retailers are certainly able to provide access convenience, as store location becomes irrelevant (Rohm and Swaminathan 2004), and consumers may shop online from any location (provided they have an Internet connection), 24 hours a day, seven days a week (Hofacker 2001). Compared to shopping at brick-and-mortar locations, shopping online saves the consumer travel time/effort to the location, time/effort spent parking, and time/effort spent walking from the parking lot to the store (Bhatnagar, Misra and Rao 2000). When considering the costs and benefits associated with shopping, online shoppers believe the time-saving benefit of accessing retailers via the Internet far outweighs the costs of delayed merchandise possession and the risks associated with shopping online (Wolfenbarger and Gilly 2001; Morganosky and Cude 2000). This leads to the development of Hypothesis 2.

H₂: Online shoppers have more favorable perceptions of access convenience than traditional in-store shoppers.

Although it is an important aspect of retail convenience, providing access convenience

alone will not necessarily lead to success. To facilitate the decision-making process, the retailer must also provide the information necessary for the consumer to make the best purchase decision. *Search convenience* is "the speed and ease with which consumers identify and select products they wish to buy" (Seiders, Berry and Gresham 2000, p. 83), and includes effective interactive customer systems, store design and layout, product displays, store signage, and knowledgeable salespeople. So while access convenience reduces the time and effort necessary to reach a retailer, search convenience eases consumers through the shopping process by helping them make their purchase decision.

Many turn to the Internet to reduce the effort associated with making a decision (Todd and Benbasat 1992; Ratchford, Lee and Talukdar 2003; Biswas 2004; Dabholkar 2006). Benefits falling within the domain of search convenience for online shoppers include website design (Szymanski and Hise 2000), navigation (Childers *et al.* 2001), and the selection and availability of product information (Wolfenbarger and Gilly 2001). Online retailers design their websites carefully to provide the consumer with a website that is easy to navigate and easy to search. By doing so, they are facilitating search convenience as consumers arriving at such a website can quickly and easily find exactly what they are looking for.

Also considered within the domain of search convenience is the product selection offered by the retailer. A virtual retailer is not limited by shelf space; therefore, they can often offer a wider selection of products than traditional retailers. In addition, online retailers are able to provide additional written information about the product offerings. Online consumers are often faced with an extensive product assortment and a limited amount of time to make a decision; therefore, several e-retailers are offering decision aids (i.e., recommendation agents or shopping bots) to make the information search process and the formation of a consideration set more convenient for consumers (Punj and Moore 2009).

Conducting such an extensive search at a traditional store would consume considerable amounts of time and effort. By making it quick and easy to compare alternatives before purchase, online shopping facilitates search convenience. Consequently, online shoppers are expected to have more favorable perceptions of search convenience. This is formally stated as Hypothesis 3.

H₃: Online shoppers have more favorable perceptions of search convenience than traditional in-store shoppers.

Transaction convenience is defined as “the speed and ease with which consumers can effect or amend transactions” (Seiders, Berry and Gresham 2000, p. 86); therefore, traditional stores and online stores with quick checkouts and easy return policies rank high in transaction convenience. At traditional stores, shoppers often spend time physically waiting in line to complete a transaction. Because the checkout process occurs at the end of the shopping experience, it is often frustrating for customers to have to spend additional time and effort to complete a transaction.

Many retailers are turning to self-service technology (in the form of self-checkout lanes) to attract new customers, increase customer loyalty, lower costs, and differentiate their offerings from the competition (“Help Yourself” 2009; Joseph 2009). In addition to the aforementioned benefits, retailers incorporating self-service technology are also offering greater transaction convenience since customers perceive self checkouts to be faster than waiting in line (Seiders, Berry and Gresham 2000). While self checkouts offer transaction convenience, it is important to note that this technology is not available in every store.

One of the main benefits of shopping online is that customers never have to wait in line (Wolfinbarger and Gilly 2001). Online shoppers are in “virtual checkout lines” where they can complete the transaction themselves when ready. Some consumers even mention the speed and efficiency of online checkouts as

influencing their decision to shop online (“Online Shoppers Care Most About Price” 2007). While offering transaction convenience may not be the primary reason for shopping online, it still minimizes the nonmonetary costs associated with shopping online. Hypothesis 4 states the following:

H₄: Online shoppers have more favorable perceptions of transaction convenience than traditional in-store shoppers.

Seiders, Berry and Gresham (2000, p. 85) define *possession convenience* as “the speed and ease with which consumers can obtain desired products.” Included within the domain of possession convenience are in-stock merchandise, timely production, and timely delivery. One of the motives for selecting traditional stores over online stores is the ability to actually leave the store with the desired product (Alba *et al.* 1997; Rohm and Swaminathan 2004). Consumers who place a high value on possession convenience prefer to shop at traditional brick-and-mortar stores because the benefit of having the desired product in their hands at the end of the shopping trip outweighs the costs associated with traveling to the physical location and searching through the store’s shelves to find exactly what they want. Online shoppers must wait for their orders to be processed and delivered before obtaining their purchase. This time spent waiting for orders to be processed and for delivery is a non-monetary cost associated with online shopping. This leads to Hypothesis 5.

H₅: Traditional in-store shoppers have more favorable perceptions of possession convenience than online shoppers.

The four dimensions of retail convenience share a common element—saving the consumer time and effort in a unique way. Whether shopping online or in a traditional store, consumers seek these various convenience dimensions to reduce time and effort costs associated with consumer decision making. The next section details the method used in testing these hypotheses.

METHOD

Construct Measurement

To measure the different dimensions of convenience, appropriate scale development procedures were followed (Churchill 1979; DeVellis 1991; Spector 1992). An initial survey containing several open-ended questions was administered to 196 students enrolled in upper-level marketing courses at a major university in the Southeastern United States. Questions such as "Please describe what the word 'convenience' means to you" and "Describe as specifically as possible what your ideal convenient shopping experience would be like" were asked to develop the most appropriate phrases to capture each dimension of retail convenience.

Many items were developed for each dimension based on these qualitative responses as well as the convenience literature. Next, 14 expert judges consisting of marketing faculty and marketing doctoral students who are trained in measurement and scale development, and who have an interest in research related to retailing and consumer decision making, were asked to rate the items according to how closely they matched the definitions of each convenience dimension. These judges were provided definitions of each convenience dimension and were asked to rate, on a seven-point scale ranging from "Reflects Completely" to "Does Not Reflect at All," the extent to which each item reflected its definition. Items were eliminated if they were not rated as a six or seven by all expert judges.

A pretest was then conducted to improve/clarify question wording and instructions. These pretest surveys were given to a sample of 75 upper-level undergraduate marketing students to determine the necessary modifications. This process resulted in slightly different item wordings for in-store and online shoppers.

When answering the questions related to retail convenience, respondents received the following instructions:

Think about the last time you made a *minor* purchase. Briefly describe your purchase experience. Please include what you purchased and where or from what company you made the purchase.

These instructions and open-ended questions provided a frame of reference for the respondents. Those who made their most recent minor purchase in a traditional store were directed to the scale items for in-store shopping, while those respondents who completed their most recent minor purchase online were directed to the items for online shopping. Table 1 contains the final survey items measuring each convenience dimension.

Sampling Procedure

Using the final version of the survey, data collection was conducted in two phases. In the first phase, data were collected from both students and non-students using a convenience sample. Marketing students enrolled in upper-level undergraduate consumer behavior courses at a major university in the Southeastern United States participated as both respondents and recruiters. These students were not the same as those used to develop the initial survey items. For this study, student responses are appropriate to include in the sample because students typically face multiple demands for both their time and effort. Each student completed the survey and recruited one other non-student to also complete the survey. Non-student names and phone numbers were collected, and ten percent of them were contacted to ensure authenticity. A comparison of key construct means between the student and non-student surveys revealed no differences; thus, these groups were combined in subsequent analyses. This process resulted in 346 total usable surveys (50 percent students, 51 percent male, mean age 30); 241 completed their last minor purchase in a traditional store, while 105 completed their last minor purchase online.

A second phase of data collection was undertaken to increase our sample size in each

TABLE 1
Scale Items Measuring Retail Convenience

Dimension	Items for In-Store Shoppers^{1,2}	Items for Online Shoppers^{1,3}
Access	1. The store was easy to get to.	1. The website was easy to find.
	2. The store had convenient hours.	2. I could order any time I wanted.
	3. Parking was reasonably available.	3. I could order from remote locations (e.g., home, work, etc.)
	4. It was easy to move through the store. ⁴	4. I was able to find the website quickly.
	5. The store wasn't too crowded. ⁴	5. The web pages loaded quickly. ⁴
	6. I was able to get to the store's location quickly.	
Search	1. The store was well-organized.	1. It was easy to navigate the website.
	2. I could easily find what I was looking for.	2. I could find what I wanted without having to look elsewhere.
	3. The store was neat.	3. The website provided useful information.
	4. The store was clean.	4. It was easy to get the information I needed to make my purchase decision.
	5. I could find what I wanted without having to look elsewhere. ⁴	5. The website was well-organized. ⁴
	6. It was easy to get the information I needed to make my purchase decision. ⁴	
Transaction	1. The store has a fast checkout.	1. The checkout process was fast.
	2. My purchase was completed easily.	2. My purchase was completed easily.
	3. I was able to complete my purchase quickly. ⁴	3. It didn't take a long time to complete the purchase process.
	4. I didn't have to wait to pay.	
	5. It didn't take a long time to complete the purchase process.	
Possession	1. I got exactly what I wanted.	1. I got exactly what I wanted.
	2. It took a minimal amount of effort on my part to get what I wanted.	2. It took a minimal amount of effort on my part to get what I wanted.
	3. What I wanted was in stock.	3. My order was delivered in a timely fashion.
	4. I got what I wanted when I wanted it.	4. I was properly notified of my order status.

¹All items were measured on a 7-point scale anchored by Strongly Agree and Strongly Disagree.

²Final n=756

³Final n=465

⁴Item was deleted based on expert judges or pretest results.

group. This time, the survey was administered to a national online panel. As an incentive, points transferrable to prizes were offered to potential respondents. Questions were asked about minor purchases both in-store and online. A total of 515 completed surveys were obtained (52 percent male, mean age 47). Means of key constructs (including the four dimensions of retail convenience) were compared across both samples, and no key differences were uncovered. While all 515 respondents had completed a minor in-store purchase, only 360 had also completed a minor online purchase. Thus, subsequent analyses are conducted on a total sample of 756 who completed a recent minor purchase in a traditional store, and 465 who completed a recent minor purchase online. For in-store shoppers, the types of products purchased include groceries, toiletries, household items, clothing, and CDs/DVDs/video games. For online shoppers, the types of products purchased include books, CDs/DVDs/video games, electronics, and items from eBay. The final sample is best described as 52 percent male with a mean age of 39.

Statistical Technique

Several statistical techniques were used to analyze the data. To test Hypothesis 1, statistics typically used in scale development were employed, including Cronbach's alpha, principal components analysis (PCA), confirmatory factor analysis (CFA), and higher order factor (HOF) analysis using LISREL 8. To test Hypotheses 2 through 5, simple comparisons of means were used to compare scale means of access, search, possession, and transaction convenience for in-store and online shoppers. Results of these statistical tests are now presented.

RESULTS

Statistical procedures commonly used in scale development were employed to test Hypothesis 1. Since the items within each dimension of retail convenience are considered to be reflective of their appropriate definitions, Cronbach's alpha was used to examine the

reliability of each dimension. For both in-store and online shoppers, the reliabilities were quite high, ranging from 0.80 to 0.95 for in-store shoppers and from 0.87 to 0.96 for online shoppers.

To ensure unidimensionality, PCA was initially undertaken on each of the final retail convenience dimensions in isolation. For access, search, transaction, and possession convenience, one strong component clearly emerged from the data for both in-store and online shoppers.

Next, to more closely examine the validity of these constructs, PCA with varimax rotation was undertaken on all of the retail convenience dimensions simultaneously. Table 2 presents the measurement properties for the in-store shopper group, while Table 3 presents the measurement properties for the online shopper group. For in-store shoppers, four components with eigenvalues greater than one were extracted from the data. Together, these four components explain 76.86 percent of the total variance. For online shoppers, four components emerged, explaining 83.58 percent of the total variance.

A more stringent CFA using LISREL 8 was also undertaken to further assess convergent and discriminant validity. As can be seen in Table 2, for in-store shoppers, the statistically significant parameter estimates provide evidence of convergent validity. Three of the items (Access2, Access3, and Search4) were problematic in that they fell slightly below the 0.70 threshold recommended by Garver and Mentzer (1999). However, they were within the 0.50 threshold recommended by Bagozzi and Yi (1988). Additionally, the majority of the squared multiple correlations (SMCs), defined as the percentage of variance in each item explained by the latent construct of interest, are above 50 percent (with the exception of Access2, Access3, and Search4), indicating that each item performed well in capturing the construct of interest. Average variance extracted (AVE) for search, transaction, and possession convenience are

TABLE 2
Retail Convenience Scale Results for In-Store Shoppers

Dimension	Alpha	Component				CFA Results			Average Variance Extracted
		1	2	3	4	Parameter Estimate	t-value	SMC	
Access1: The store was easy to get to	0.80				0.856	0.71	18.46	0.50	0.45
Access2: The store had convenient hours					0.649	0.60	15.77	0.36	
Access3: Parking was reasonably available.					0.637	0.65	17.23	0.42	
Access4: I was able to get to the store’s location quickly.					0.843	0.72	18.88	0.52	
Search1: The store was well-organized.	0.89			0.757		0.91	31.18	0.83	0.64
Search2: I could easily find what I was looking for.				0.660		0.86	28.20	0.73	
Search3: The store was neat.				0.841		0.74	22.85	0.54	
Search4: The store was clean.				0.801		0.67	20.14	0.45	
Transact1: The store has a fast checkout.	0.95		0.871			0.89	30.96	0.79	0.82
Transact2: My purchase was completed easily.			0.800			0.86	29.30	0.74	
Transact3: I didn’t have to wait to pay.			0.899			0.92	32.77	0.84	
Transact4: It didn’t take a long time to complete the purchase process.			0.907			0.95	34.75	0.90	
Possess1: I got exactly what I wanted.	0.91	0.862				0.87	29.55	0.75	0.74
Possess2: It took a minimal amount of effort on my part to get what I wanted.		0.735				0.74	23.31	0.55	
Possess3: What I wanted was in stock.		0.875				0.89	30.74	0.79	
Possess4: I got what I wanted when I wanted it.		0.869				0.92	32.76	0.85	
	Variance Extracted=76.86% Varimax Rotation					Overall Fit Statistics X ² =433.9, 96df, p=0.00 RMSEA=0.069; RMR=0.055 GFI=0.93, AGFI=0.90 CFI=0.96			
n=756									

above the 0.50 level as recommended by Bagozzi and Yi (1988). The AVE for access is 0.45, signaling possible problems with convergent validity.

For in-store shoppers, the modification indices associated with constructs and error terms reveal issues regarding discriminant validity. Specifically, there were two problematic items—Transact2 (My purchase was completed easily)

and Possess2 (It took a minimal amount of effort on my part to get what I wanted). After returning to the item wordings for further review, it appears that these items may be capturing overall satisfaction with their purchase rather than transaction convenience and possession convenience. This most likely contributed to problems with discriminant validity.

TABLE 3
Retail Convenience Scale Results for Online Shoppers

Dimension	Alpha	Component				CFA Results			Average Variance Extracted
		1	2	3	4	Parameter Estimate	t-value	SMC	
Access1: The website was easy to find.	0.89	0.793				0.74	17.91	0.55	0.66
Access2: I could order anytime I wanted.		0.627				0.85	22.10	0.72	
Access3: I could order from remote locations (e.g., home, work, etc.)		0.771				0.79	19.68	0.62	
Access4: I was able to find the website quickly.		0.775				0.86	22.27	0.73	
Search1: It was easy to navigate the website.	0.94				0.712	0.90	24.89	0.81	0.79
Search2: I could find what I waned without having to look elsewhere.					0.784	0.85	22.50	0.72	
Search3: The website provided useful information.					0.820	0.89	24.56	0.80	
Search4: It was easy to get the information I needed to make my purchase decision.					0.756	0.92	25.66	0.84	
Transact1: The checkout process was fast.	0.96			0.788		0.97	28.33	0.93	0.89
Transact2: My purchase was completed easily.				0.775		0.96	28.16	0.93	
Transact3: It didn't take a long time to complete the purchase process.				0.732		0.91	25.31	0.82	
Possess1: I got exactly what I wanted.	0.87		0.625			0.85	21.46	0.73	0.64
Possess2: My order was delivered in a timely fashion.			0.810			0.77	18.51	0.59	
Possess3: I was properly notified of my order status.			0.836			0.77	18.58	0.60	
	Variance Extracted=83.58% Varimax Rotation					Overall Fit Statistics $\chi^2=218.88$, 69df, p=0.00 RMSEA=0.066; RMR=0.025 GFI=0.94, AGFI=0.91 CFI=0.98			
n=465									

Additionally, there were five modification indices indicating that some within-construct error terms tended to correlate. These changes were not incorporated in the model, as conceptually it does not make sense to do so. In spite of these seven problematic modification indices, overall fit of the model is good: chi-square=433.9, 96 df, $p=0.00$; RMSEA=0.07; RMR=0.06; GFI=0.93, AGFI=0.90, CFI=0.96.

For online shoppers (see Table 3), the statistically significant parameter estimates

provide evidence of convergent validity. All of the SMCs are above 50 percent, and all AVEs are above 0.50, indicating that each item performed well in capturing the construct of interest. This evidence of convergent validity is similar to the patterns for in-store shoppers. Similar problems with discriminant validity surfaced in the measurement model for online shoppers. With respect to the modification indices, Transact3 (It didn't take a long time to complete the purchase process) tended to be associated with other constructs, while three

within-construct error terms had a tendency to correlate. In spite of these issues, the model achieved good overall fit: chi-square=218.88, 69 df, $p=0.00$; RMSEA=0.07; RMR=0.03; GFI=0.94, AGFI=0.91, CFI=0.98.

Finally, to test H_1 , the factor structure of retail convenience as depicted in Figure 1, HOF models were assessed for both in-store and online shoppers. For the model to be properly identified, five items measuring retail convenience in general were used to measure the exogenous construct. These items (convenient – inconvenient; easy – hard; hassle-free – stressful; effortless – strenuous; and saves time – wastes time) were in a seven-point, semantic differential format and produced an alpha level of 0.93 for the in-store group and 0.96 for the online group.

Table 4 shows results of the HOF models. In both groups, the structural paths leading from the general retail convenience construct to each

dimension are statistically significant, which supports the HOF structure. Thus, there is evidence in support of Hypothesis 1. Regardless of the shopping format (i.e., in-store versus online shopping), retail convenience is a higher-order construct consisting of four distinct dimensions—access, search, transaction, and possession.

For Hypotheses 2 through 5, the mean scale scores for access, search, transaction, and possession convenience were compared for online and in-store shoppers. The results of the mean comparisons appear in Table 5.

Hypothesis 2 states that online shoppers have more favorable perceptions of access convenience than in-store shoppers. A comparison of scale means for these two groups yields a t statistic of 5.91 ($p=0.000$). Online shoppers do have more favorable perceptions of access convenience (scale mean=6.43) than in-store shoppers (scale mean=6.09), providing

TABLE 4
Higher-Order Factor (HOF) Model Results

	Path Estimate	t-value	Path Estimate	t-value
RETCON→ACCESS	0.45	11.02	0.67	15.86
RETCON→SEARCH	0.68	16.32	0.79	19.63
RETCON→TRANSACTION	0.63	15.52	0.87	22.50
RETCON→POSSESS	0.65	16.08	0.64	15.10
Overall fit statistics	Chi-sq=798.13, df=181, $p=0.00$ RMSEA=0.07; RMR=0.09 GFI=0.91; AGFI=0.89 CFI=0.95		Chi-sq=695.4, df=144, $p=0.00$ RMSEA=0.08; RMR=0.08 GFI=0.88; AGFI=0.84 CFI=0.94	

TABLE 5
Comparison of Means

Dependent Measures	In-Store			Online			t-value	Signif. Level
	n	Mean	Std. Dev.	n	Mean	Std. Dev.		
Access	769	6.09	1.00	460	6.43	0.99	5.91	0.000
Search	770	5.72	1.11	466	6.11	1.17	5.86	0.000
Transaction	771	5.14	1.63	466	6.26	1.18	13.94	0.000
Possession	771	5.95	1.22	466	6.13	1.22	2.51	0.012

support for H₂. Hypothesis 3 states that online shoppers have more favorable perceptions of search convenience than in-store shoppers. Here the comparison of means produces a *t* statistic of 5.86 ($p=0.000$). The scale mean of 5.72 for in-store shoppers is significantly less than the scale mean of 6.11 for online shoppers; thus, there is evidence in support of H₃.

Hypothesis 4 pertains to transaction convenience and states that online shoppers have more favorable perceptions of transaction convenience than in-store shoppers. The *t* value of 13.94 ($p=0.000$) indicates a statistically significant difference between the two group means. The mean for online shoppers (6.26) is greater than the mean for in-store shoppers (5.14), providing support for H₄. Finally, Hypothesis 5 predicts that in-store shoppers have more favorable perceptions of possession convenience than online shoppers. The *t* statistic is again significant ($t=2.51$, $p=0.012$); however, the results are in the opposite direction. The possession convenience scale mean for in-store shoppers is 5.95, while the scale mean for online shoppers is 6.13. This finding is counter-intuitive, as one would expect in-store shoppers to benefit more from possession convenience than online shoppers. Possible reasons for this result are provided in the next section.

DISCUSSION

In this study, consumer perceptions of retail convenience were examined for both in-store and online shopping. Hypothesis 1 was developed to better understand the structure of the retail convenience construct. Results provide support for retail convenience as a higher-order construct consisting of access, search, transaction, and possession convenience. These results are consistent for both in-store and online shopping, highlighting the importance of convenience regardless of the shopping format chosen.

The results of the CFA reveal issues surrounding the measurement of access convenience for in-store shoppers. Access

convenience is defined as "the speed and ease with which consumers can reach a retailer" (Seiders, Berry and Gresham 2000, p. 81). This includes how quick and easy it is to access the shopping channel initially and how quick and easy it is to access the merchandise once the consumer is at the store. Returning to the item wordings for further review, it appears that Access1 and Access4 are capturing the speed and ease associated with initial access to the retailer, while Access2 and Access3 are capturing the speed and ease associated with accessing the merchandise. This may account for lower SMCs associated with Access2 and Access3 and problems with convergent validity.

Furthermore, upon examination of the phi matrix for online shoppers, the dimensions of access and search convenience were correlated at 0.80, and the dimensions of search and possession convenience revealed a correlation of 0.82. Construct correlations for in-store shoppers were lower, in the 0.40 to 0.60 range. These findings suggest that while distinct dimensions of convenience certainly exist theoretically, consumers may tend to view convenience as more of a general construct, particularly with online shopping.

Hypotheses 2 through 5 were tested by examining differences in scale means across two shopping formats—in-store shopping and online shopping. These differences were examined for access, search, transaction, and possession convenience. Although the results for Hypotheses 2 through 4 were expected, one particularly interesting finding is the result of H₅. The differences in mean scores for possession convenience across the in-store and online shopper groups are significant; however, the scale means are contrary to the hypothesis. Online shoppers have significantly higher perceptions of possession convenience than in-store shoppers. These findings are counter-intuitive as in-store shoppers take immediate possession of their purchase and online shoppers must wait for delivery.

Recall that convenience is characterized by both time and effort expenditures. This means

that possession convenience deals with both the time *and* effort associated with acquiring a purchase. While shopping at a traditional store is certainly faster than waiting for delivery of online orders, consumers must put forth effort at other stages of the shopping process to reap the benefits of immediate possession. So, while in-store shoppers can obtain the purchase quickly, they expect to expend a certain amount of effort to gain possession. On the other hand, online shoppers obtain the purchase easily through parcel delivery; however, the ease associated with delivery is accompanied by a longer wait time. It may be that the contradictory finding of Hypothesis 5 is the direct result of the tradeoffs consumers are willing to make when selecting a shopping format. That is, online consumers expect to obtain the product with little/no effort at the expense of having to wait for delivery. By meeting or exceeding these expectations, online retailers are improving perceptions of possession convenience.

A *post hoc* review of the item wordings for possession convenience reveals that the possession convenience items likely captured *satisfaction* with possession. Possession convenience is defined as "the speed and ease with which consumers can obtain desired products" (Seiders, Berry and Gresham 2000, p. 85). Items capturing this dimension include "I got exactly what I wanted" and "It took a minimal amount of effort on my part to get what I wanted." While conceptually these items reflect the definition, it is suspected that respondents in the online shopper group did perceive higher possession convenience because they were more satisfied with the overall shopping experience. That is, they did not mind the wait for their product as other aspects of the purchase process (e.g., access and search) required minimal time and effort expenditures. Thus, possession convenience in this study may have been more of a general appraisal of, or satisfaction with, the *entire* purchase process, rather than a specific aspect of completing the purchase.

MANAGERIAL IMPLICATIONS

In a market characterized by uniform product offerings, retailers should focus on the importance of convenience in adding value to the retail experience. Doing so allows retailers to improve upon and differentiate their offerings from those of the competition. While many retailers realize that convenience is an important offering, few are confident in developing strategies to enhance and deliver superior convenience (Berry 2001). This study provides an important first step by empirically examining consumer perceptions of retail convenience across two popular retail formats.

Results reveal that retail convenience is a higher-order factor, consisting of access, search, transaction, and possession convenience. In addition, the dimensions of retail convenience are highly related. Perhaps the specific dimensions of retail convenience are not easily distinguishable in the minds of consumers. Rather, they tend to think in more general terms of, "This is saving me time and/or effort." Armed with this knowledge, retailers should realize the importance of each convenience dimension in influencing overall consumer satisfaction with convenience. If a retailer's convenience strategy is limited in the types of convenience it provides, then consumers' overall convenience perceptions of that retailer could surely suffer. Not only is it important to focus on each independent dimension, but it is also important to combine the dimensions in creating a comprehensive convenience strategy (Seiders, Berry and Gresham 2000).

This study provides evidence of higher perceptions of access, search, and transaction convenience for online shoppers (when compared to traditional in-store shoppers). When considering the concept of convenience across retail formats, customers and marketers alike have come to think of online shopping as "convenient" and in-store shopping as "inconvenient." Though the difference is often perceived as simple, this study illustrates that different types of convenience contribute to our

overall thoughts regarding what is "convenient" or "inconvenient" in a retail setting. Not only should retailers keep these differences in mind when developing convenience strategies, but they should also develop distinct convenience strategies for in-store and online formats.

The fact that possession convenience was viewed more favorably by online shoppers than in-store shoppers seems to be an indication of the trade-offs consumers are willing to make in the purchase process. In order to have access anywhere and anytime, and in order to be able to carry out the search process with ease, online shoppers are willing to wait for their product to arrive. Furthermore, they are not inconvenienced by the wait. Some retailers (e.g., Walmart, Best Buy, and Lowe's) now offer in-store pick up for online purchases to give consumers the best of both shopping formats—the benefits of shopping online and more immediate product possession (Gunn 2006; Wolf 2007).

LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

This study is an initial attempt to delineate the different retail convenience dimensions for in-store and online shoppers. As such, several limitations must be mentioned. In collecting the data, convenience samples were used. The first data collection involved a combination student/non-student sample concentrated in the southeastern part of the United States, and the second data collection involved a national online panel. With an online survey, several members of the population are eliminated as possible respondents. These include individuals not currently online, without access to the Internet, and/or lacking the online skills necessary to participate in the study. Using an online panel also introduces self-selection bias. The combination of these sampling issues limits the generalizability of the findings.

In future research, efforts to improve the measures of retail convenience are warranted. First, future attempts to measure access convenience for in-store shoppers should focus

on the creation of items to measure the time and effort associated with *initial* access to the retailer. Second, attention should be given to improving the discriminant validity of the scale, particularly with Transact2 and Possess2 for in-store shoppers and with Transact3 for online shoppers. In addition, retail convenience should be examined in the context of other construct to test aspects of nomological validity and predictive validity. By improving current measures, future researchers can contribute to the operationalization of the retail convenience construct.

The scale items measuring each retail convenience dimension were formulated to capture both the time and the effort expenditures associated with retail shopping. In the future it would be interesting to separate out the effects of both time and effort on the different dimensions of retail shopping convenience. Are time and effort expenditures equally important to all dimensions, or is one particular facet (i.e., time or effort) more important in establishing a particular dimension? This question and its practical implication to the retail arena deserve further attention.

Additional research on retail shopping convenience and its application to retail environments is also warranted. Following propositions set forth by Berry, Seiders and Grewal (2002), future studies should investigate the effect of distractions, engaging activities, firm-related factors (e.g., retail brand), wait time information, and time-saving options on perceptions of retail convenience. Another future research outlet is to determine the effect of different dimensions of retail shopping convenience on consumer outcomes of satisfaction and quality. By learning more about retail convenience and its effect on consumer perceptions, retailers can become more effective in their service to customers.

Retailers could also benefit from greater understanding of the trade-offs consumers are willing to make for convenient shopping. Researchers interested in this area could

perform a conjoint analysis to determine exactly where those trade-offs occur. Information gained could help retailers determine their optimal "convenience mix"—that is, the optimal combination of access, search, transaction, and possession convenience to best serve their customers. Regardless of the avenue chosen by future researchers, retail convenience is an important construct for consumers faced with purchase decisions.

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