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## Reactions to Store Environment and Interpersonal Service Quality in Supermarkets vs Hypermarkets\*

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### Abstract

**Purpose:** The purpose is to verify the impact of the store environment on interpersonal service quality (ISQ), shopping value and patronage intention, as well as the moderating role of the store format: supermarkets vs hypermarkets. This is significant as previous studies on retailing neglected the effect of interpersonal service quality on the experiential shopping value. The comparison of the model between two retailing formats (hypermarkets and supermarkets) provides a significant contribution and responds to a need to provide insights regarding the moderation of the store types on the contribution of interpersonal service quality and experiential value to customer's retention. **Research design, data, and methodology:** The hypotheses have been tested after analyzing the data of a survey among 405 consumers exiting stores representing various retailing stores in Tunisia. A Structural model have been finally verified by a path analysis after applying a confirmatory factorial analysis. Multigroup analyses on AMOS allowed to verify the moderation of store types. **Results:** Results mainly show that patronage intention is affected by the experiential perceived value dimensions. The latter is a direct consequence of ISQ and an indirect outcome of perceived shopping environment. The impact of value, environment and ISQ is moderated by the store type.

**Keywords :** Experiential shopping value, Distribution, Hypermarkets, Supermarkets, patronage intention.

**JEL Classification Code:** D46, D49, M31, M39, L81

### 1. Introduction

Traditional brick-and-mortar stores are nowadays facing a harder competition from the online distribution channel (Hu & Jasper, 2015). To allow them preserving their market share and sustainability, it is relevant to enhance the retailing store's experiential value using the shopping environment and social interactions (Garrouch, Mzoughi, & Chaieb, 2020; Garaus & Wagner, 2016; Hu & Jasper, 2015; Arnold & Reynolds, 2009). Fiore and Kim (2007) suggest the integration between Stimulus-Organism-Response and Cognition-Emotion-Value models via incorporating variables pertaining to hedonistic and utilitarian experiences. This integration can show the causal effects among many

variables using the multi-dimensional perspective of experiential shopping value and testing the direct effect of each dimension, rather than the aggregate experiential value. New causal relationships involving all the dimensions of perceived shopping value can be verified in the context of retailing. Hypermarkets and supermarkets are not exempt from this recommendation, although the research in experiential values of shopping in the traditional grocery retail sector needs more investigations (Garrouch et al., 2020). In addition, there is a need to conduct comparative studies explaining customers' reactions in various store formats (Goic, Levenier, & Montoya, 2021; Garrouch et al., 2020; Kamran-Disfani, Mantrala, Izquierdo-Yusta, & Martínez-Ruiz, 2017). Indeed, there is a gap in retailing

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literature, stemming from the lack of comparative studies about the effect of experiential values, namely between the types of retail stores.

The objective of this study is to test a structural model in an ordinary shopping situation integrating the impact of the store environment on Interpersonal Service Quality (ISQ), shopping value and patronage intention, as well as the moderating role of the store format: supermarkets vs hypermarkets.

The significance of this study stems from the lack of studies testing the effect of the store's interpersonal service quality on the dimensions of the experiential shopping value. In addition, the impact of the store environment on the dimensions of experiential shopping value is still uncovered, namely in the groceries shopping context. Moreover, the comparison of the model links in two types of stores—hypermarkets vs supermarkets—provides a significant contribution.

Considering the explicit hedonistic aspects of the ordinary shopping context is also a contribution of this study. Research focusing on experiential shopping value is still emerging in the grocery retail sector, even though experiential dimensions of shopping have been largely established in hedonic retail sectors (Lang & Hooker, 2013). Much research has suggested considering the impact of the shopping experience on shopper outcomes across different retail settings (Lang & Hooker, 2013). Non-financial motives are among the factors explaining shopping strategies in ordinary retailing. In low-involvement purchase areas, shopping trip can be characterized by an interest in the credence and experiential aspects of grocery (Van Camp, Hooker, & Souza-Monteiro, 2010). Thus, the value of this research stems from including experiential evaluations as predictors of behavioral intentions in ordinary shopping situations like those in supermarkets and hypermarkets. In addition, the interaction between experiential shopping value and interpersonal service quality in stores is still an interesting matter to consider by stores. Studying them will open debate and provide tools for retailers in order to retain customers. Moreover, the moderating impact of the store type will shed light on the relative importance of the different factors predicting behavioral intentions for each of the chosen retailer types: hypermarket vs supermarkets.

## 2. Literature Review

### 2.1. The Contribution of Environmental Psychology

Mehrabian and Russel (1974) are considered as the pioneers of the research regarding consumer reactions to the retail environment. Their Stimulus-Organism-Response based model examines the impact of many stimuli of the

store environment on emotion and behaviors. The stimulus is an impelling force of the store environment having the potential to influence affective and cognitive processes (Fiore & Kim, 2007).

Research showing the importance of a general retail configuration of environmental cues (Baker, 1986; Baker, Parasuraman, Grewal, & Voss, 2002; Garrouch et al., 2020) support that distinctive stores atmospherics have considerable value regarding the customer attraction and retention. This holistic view is considered as a “trade dress” for the retailer (Kopp & Langenderfer, 2014). The latter is a type of intellectual property including features related to the store environment, such as “interior and exterior architectural motif and decor, signage, menu, cuisine, sales technique, or entertainment features—anything and everything that may play a role in what is loosely identified as a business's atmosphere” (Kopp & Langenderfer, 2014). Thus, this study adopts the multidimensional approach to assess the shopping environment, which allows verifying the effect of each store environment dimension on shopper reactions. The chosen holistic multidimensional approach involves three dimensions: ambiance, design, and social environment (Baker et al., 2002; Baker, 1986). The first one involves the perception of background characteristics, such as music, lighting, temperature, and scent. The second dimension -design- refers to any stimulus existing at the forefront of the shopper's awareness (e.g., materials, architecture, wall colors). The social environment is the third one and includes the type, number and behaviors of customers and employees.

The organism mediates internal assessments between consumer responses and the environment stimulus (Lin & Chiang, 2010). It comprises consciousness, cognition and affect, all represented in the perceived experiential value. Moreover, ISQ is a cognitive variable, which is rarely considered in shopping behavior research.

The response involves the intentional or behavioral variables in the shopping context such as avoidance vs. willingness to stay and explore the store; it encompasses behavioral reactions after the shopping experience like patronage intention (Grewal, Baker, Levy, & Voss, 2003; Cho, 2012) and share of wallet (Babin & Attaway, 2000).

### 2.2. Organism and Behavioral Reactions to the Store Environment

#### 2.2.1. Retailer's Interpersonal Service Quality

The quality of the interaction between store employees and customers is an important aspect of the evaluation of a service provider (Lee & Yang, 2013). It has distinctive features making it a key element of the service quality concept (Lehtinen & Lehtinen, 1991; Lee & Yang, 2013). Lehtinen and Lehtinen (1991), call it “interactive quality” as

it assesses the quality of interactions of the consumer with the service's interactive elements, namely the employees and interactive equipment. Their results of in-depth interviews show that interactive quality is influential in the retailing context. It is positively influenced by the store environment (Darian, Wiman, & Tucci, 2005; Baker et al., 2002). The perception of the employees and the attitude toward them have an impact on consumers' expectations (Goić et al., 2021), attitude toward the store (Babin, Babin, & Boles, 1999) and ISQ (Baker et al., 2002). Store design helps customers reach merchandise easily and perform transactions rapidly. Consumers may perceive that the interaction with employees is easier when the environment is agreeable.

**H1:** ISQ is positively influenced by the store environment in hypermarkets and supermarkets.

**H1a:** ISQ is positively influenced by the ambient environment

**H1b:** ISQ is positively influenced by the store design

**H1c:** ISQ is positively influenced by the social environment

### 2.2.2. The Role of Shopping Perceived Value

In an experiential approach, value is a relativistic preference describing an experience of interacting with an object (Holbrook, 1999). It is a comparative, personal and situational variable. The transactional perspective limits it to an assessment of the utility of something, based on perceptions of what is received (benefits from purchased goods, services or experiences) and what is given like money, time, and other psychological sacrifices (Zeithaml, 1988). Shopping value is the perception of the overall shopping experience benefits obtained from the store. It is considered as an outcome of the retail store attributes and consumer's characteristics (Stoel, Wickliffe, & Lee, 2004; Diallo, Coutelle-Brillet, Rivière, & Zielke, 2015; Choi & Park, 2018). Holbrook (1999) broadens the traditional conceptualizations of value by combining three dichotomous dimensions representing "self-oriented vs. other-oriented" values, "active vs. reactive" nature and "intrinsic vs. extrinsic" purpose. This classification has been operationalized in shopping experience models (Vongurai, 2021; Mathwick, Malhotra & Rigdon, 2001; Garrouch et al., 2012, 2020), using the following types:

- Service excellence, which reflects the service superiority evaluation.

- Customer Return on Investment (CROI) that reveals a trade-off between the perceived utility of the visit and the investment made by the customer. Its sub-dimensions are economic and efficiency value.

- Playfulness, which involves amusement in the course of the experience of shopping. It can be divided into escapism and enjoyment (Mathwick et al., 2001).

- Aesthetics reflecting the appreciation of the entertaining elements (entertainment) and the perceptible visual features (visual appeal).

In the brick-and-mortar shopping situation, the dimension excellence has been dropped because of reliability and validity reasons (Garrouch et al., 2012, 2020). Thus, this dimension is not included in this study.

### 2.2.3. The Relationship between ISQ and Experiential Shopping Value

Shopping value perception increases when service quality is perceived favorably (Hong, Kim, & Oh, 2019; Calabuig Moreno, Prado-Gascó, Hervás, Núñez-Pomar, & Añó Sanz, 2015; Lin & Chiang, 2010; Babin, Chebat, & Michon, 2004). More specifically, it depends on the quality of the interaction with the store employees (Baker et al., 2002). Social presence of employees (merchants) interacting with consumers has been shown as a variable influencing the trust toward them which leads, in fine, to better shopping intentions (Jiang, Rashid, & Wang, 2019). Services provided by the store employees can facilitate purchase and payment. Consequently, shoppers may conclude that these services are a factor of time reduction and that the utilitarian value is acceptable. Previous studies have linked ISQ and interaction quality with patronage intentions (Baker et al., 2002), satisfaction (Kang, 2020) and value (Cho, 2012). The extrinsic shopping value assessment is also expected to rely more on interpersonal services in large stores because it is obvious that they are easier to explore. Indeed, the help provided by store employees may increase the efficiency of the visit in larger stores. This help may also guide shoppers to the best deals of the day. The efficiency and economic values are therefore expected to be more influenced in hypermarkets than in supermarkets. Therefore,

**H2:** The ISQ has a positive impact on shopping value dimensions in hypermarkets and supermarkets.

**H2a:** The ISQ has a positive impact on the efficiency in hypermarkets and supermarkets.

**H2b:** The ISQ has a positive impact on the economic value in hypermarkets and supermarkets.

**H3:** The impact of ISQ on the extrinsic dimensions of value is more intense in hypermarkets.

**H3a:** the impact of ISQ on the efficiency value of the shopping experience is more intense in hypermarkets.

**H3b:** the impact of ISQ on the economic value of the shopping experience is greater in hypermarkets.

### 2.2.4. Shopping Value as a Consequence of the Store Environment

Literature shows that an attractive store environment can be considered among the important strategies inducing

cognitive and affective responses, leading in fine to favorable shopper behaviors, such as the loyalty toward the retailer (El-Adly & Eid, 2016), store patronage intentions (Baker et al., 2002; Garrouch et al., 2020), share of wallet and consumer spending with a specific store (Babin & Attaway, 2000).

Perceived shopping value depends on the store's environmental context because it is based on an overall assessment of the quantitative and qualitative factors of the consumption experience (Miniero, Rurale, & Addis, 2014). Different models have tested the direct impact of store's environmental perception on shopping value (Bakini Driss, Ben Lallouna, & Jerbi, 2009; Babin & Attaway, 2000).

Babin and Attaway (2000) verify the impact of the affective quality of the store atmosphere on hedonic and utilitarian values. Bakini Driss et al. (2009) use the same value classification and confirm its link to three dimensions of the shopping environment: design, social and ambiance.

The perception of the store environment is expected to be more influential in bigger facilities of shopping. The time taking activity of shopping in hypermarkets, compared to supermarkets, makes it essential to rely on a well-planned and studied shopping environment. It keeps consumers exploring the store for both reasons: the intrinsic motivation and the extrinsic one. It is then more likely for shopper to enjoy the shopping environment in hypermarkets. Thus,

**H4:** The perception of the store environment has a positive impact on the experiential shopping value dimensions, namely efficiency (H4a), economic value (H4b), visual appeal (H4c), entertainment (H4d), and escapism (H4e), in hypermarkets and supermarkets.

**H5:** The impact of the perception of the shopping environment on experiential shopping value, namely efficiency (H5.a), economic value (H5.b), Visual appeal (H5.c), entertainment (H5.d), and escapism (H5.e) is greater in hypermarkets than in supermarkets.

### 2.2.5. Shopping Value and Patronage Intention

Many frameworks have shown that perceived value improves customers' attitude (Choi & Park, 2018), triggers purchase behavior and leads to customer retention (Grewal et al., 2003). Indeed, Choi and Park (2018) show that utilitarian shopping values depend on variety seeking and price sensitivity and enhances positive attitudes of shoppers toward the retailer. In addition, Kim (2012) show that practical value leads to enhance repurchase intentions. This extrinsic shopping value is specifically verified as a positive trigger to approach behavior (Babin et al., 2004), store patronage behavior (Babin & Attaway, 2000), re-purchase intention (Stoel et al., 2004) and loyalty toward the retailer (Diallo et al., 2015). Empirical evidence also shows the impact of the intrinsic shopping value on attitudes (Choi &

Park, 2018), the behavioral intention (Lin & Chiang, 2010), Shopping intention (Lee, Chun, & Choi, 2019), loyalty (Diallo et al., 2015), store patronage intention (Stoel et al., 2004; Babin & Attaway, 2000) and approach behavior (Babin et al., 2004).

**H6:** Patronage intention is positively affected by experiential shopping value dimensions, namely: efficiency (H6a), economic value (H6b), Visual appeal (H6c), entertainment (H6d), and escapism (H6e).

**H7:** The impact of experiential shopping value dimensions, namely efficiency (H7a), economic value (H7b), Visual appeal (H7c), entertainment (H7d), and escapism (H7e) on patronage intention is more intense in hypermarkets than supermarkets.

As a summary the conceptual model is represented in figure 1.

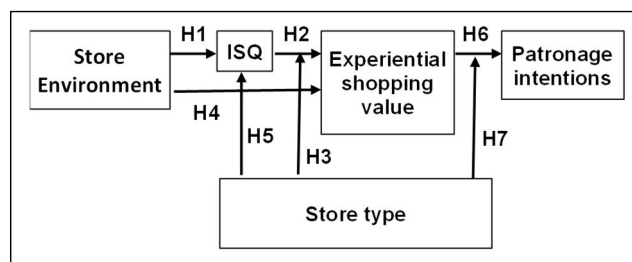


Figure 1: Conceptual Model

## 3. Research Methodology: Data Collection and Sample

A survey was conducted with both male and female shoppers of different ages intercepted in many stores at various times of the day. Volunteer interviewees filled in a questionnaire after a shopping experience in one of twelve selected stores. The latter belong to eight retail companies established in Tunisia.

The survey resulted in 405 respondents distributed as shown in Table.1.

Table 1: Sample structure

Age	Gender		Total
	M	F	
18-20	21	13	34
20-29	59	80	139
30-39	67	66	133
40-49	43	20	63
50+	20	16	36

Store environment perceptions and ISQ were measured via scales developed by Baker et al. (2002).

The first includes seven items and the second is assessed via three items. The perceived experiential shopping value

dimensions were assessed via eleven items extracted from Mathwick et al. (2001)'s scale which has been adapted to the Tunisian retailing context (Garrouch, Mzoughi, & Tritar, 2012). The three-item scale of Grewal et al. (2003) was used to measure the store patronage intention.

## 4. Findings

### 4.1. Reliability and Validity

The exploratory factorial analysis resulted in three dimensions: ambiance, design, and social environment. The confirmatory factor analysis of the whole measurement model confirmed the scale structure.

Regarding experiential shopping value, the final structure has five dimensions: efficiency, economic value, visual appeal, entertainment (playfulness), and escapism.

The reliability indicators, for all the variables, showed acceptable values of Cronbach Alpha and CR as depicted in Table 2. This table displays convergent validity measured by AVE.

**Table 2:** Reliability and convergent validity

	Loading	Alpha	CR	AVE
<b>Ambient</b>		.81	.83	.63
A1	.851			
A2	.796			
<b>Social</b>		.86	.86	.68
S1	.869			
S2	.852			
S3	.778			
<b>DESIGN</b>		.82	.83	.55
D1	.822			
D2	.820			
<b>ENT</b>		.85	.82	.60
Ve1	.92			
Ve2	.89			
<b>VA</b>		.86	.87	0.70
Va.1	.86			
Va.2	.84			
Va.3	.80			
<b>ESCAP</b>		.88	.86	.66
Vesc1	.937			
Vesc12	.890			
<b>ECON</b>		.80	.79	.56
Vecon1	.875			
Vecon2	.791			
<b>EFFI</b>		.86	.84	.64
Veff1	.968			
Veff2	.761			
<b>ISQ</b>		.79	.81	.58
ISQ1	.795			
ISQ2	.756			
ISQ3	.843			
<b>Patronage</b>		.85	.82	.60
P1	.828			
P2	.872			
P3	.743			

The discriminant validity is confirmed for all variables because all square correlations are less than the AVEs (Table 3).

**Table 3:** Discriminant validity

	1	2	3	4	5	6	7	8	9	10	AVE
1	.83										.70
2	.33	.79									.63
3	.32	.39	.82								.68
4	.52	.39	.50	.74							.55
5	.61	.13	.07	.35	.77						.60
6	.50	.29	.09	.27	.50	.81					.66
7	.43	.24	.32	.31	.22	.30	.75				.56
8	.52	.26	.31	.35	.39	.29	.65	.77			.60
9	.30	.12	.15	.37	.28	.22	.35	.38	.80		.64
10	.35	.32	.50	.32	.04	.08	.37	.36	.14	.76	.58

Moreover, the fit indicators of the measurement model are acceptable (GFI= 0.917, RMSEA=0.037, Khi-Square = 582.396 with a DF=374)

### 4.2. The Structural Model

The unconstrained structural model showed acceptable fit and parsimony indicators (Chi-square=696.160, Degrees of freedom=398, CMIN=1.7490, NFI=0.906, GFI=0.903, RMSEA= 0.043).

The structural model paths displayed in Appendix A show that ISQ is positively affected by the two dimensions of the retail store environment which are ambient ( $\beta=0.118, p=0.003$ ) and the store's social environment elements ( $\beta=0.101, p=0.041$ ). Design ( $\beta=0.379, p=0.000$ ) is not significantly related to ISQ. Thus, H1 is partially accepted.

The economic dimension of perceived shopping value is significantly impacted by ISQ ( $\beta=0.25, p=0.00$ ), contrary to the efficiency dimension ( $p=0.793$ ). H2a is rejected and H2b is accepted.

The impact of ISQ on shopping efficiency is not significantly moderated by the store type because the significance of the difference between the constrained model and the unconstrained one is non-significant ( $pdiff(\text{ISQ-economic}) = 0.695, pdiff(\text{social-ISQ}) = 0.134$ ). Thus, H3a is rejected.

The difference between the constrained model and the unconstrained model of the impact of ISQ on economic shopping value is significant ( $pdiff(\text{ISQ-economic})=0.006$ ), but unexpectedly, this influence is more intense in supermarkets ( $\beta=0.539$ ) than in hypermarkets ( $\beta=0.086$ ). Although the moderation exists, H3b is rejected.

The economic dimension of perceived shopping value is significantly impacted by the store design ( $\beta=0.152, p=0.026$ ). While the effects of the store's social environment ( $p=0.1826$ ) and ambiance ( $\beta=0.068, p=0.253$ ) are not significant. H4b is partially accepted.

The difference between the constrained model and the unconstrained model, regarding the impact of store design on the economic value is significant ( $pdiff=0.001$ ). This impact is significant in hypermarkets ( $\beta=0.679$ ,  $p=0.00$ ), contrary to supermarkets ( $\beta=0.008$ ,  $p=0.925$ ). The difference in the intensity of the impact of social environment and ambiance on the economic value is not confirmed because these impacts are not significant in both kinds of stores. H5b is partially accepted.

The shopping efficiency dimension of perceived shopping value is significantly impacted by the store design ( $\beta=0.293$ ,  $p=0.000$ ), contrary to the social environment ( $p=0.064$ ) and ambiance ( $p=0.529$ ). H4a is partially accepted. Regarding the moderation effect of the store type, the difference between path estimates in hypermarkets and supermarkets situations is non-significant for the impact of ambiance ( $pdiff=0.123$ ) and design ( $pdiff=0.072$ ). It is significant for the impact of social environment on efficiency ( $pdiff=0.009$ ,  $\beta_{hyper}=-0.192$ ,  $\beta_{super}=0.11$ ;  $\beta_{super}=-0.1710$ ,  $p_{super}=0.025$ ). H5a is still rejected because results show that the social environment is negatively more intense.

The impact of shopping environment on the visual appeal value is significant for two dimensions: design ( $\beta=0.462$ ,  $p=0.000$ ) and ambiance ( $\beta=.152$ ,  $p=0.007$ ). The social dimension impact is non-significant ( $p=0.379$ ). H5.c is partially accepted.

Regarding the moderation effect of the store type, the difference between path estimates in hypermarkets and supermarkets situations is significant for the impact of social environment ( $pdiff=0.02$ ). It is non-significant for the impact of the store's design on visual appeal ( $pdiff=0.113$ ), and ambiance ( $pdiff=0.054$ ). H5.c is partially accepted because results show that the social environment impact on visual appeal is more intense in hypermarkets ( $\beta_{hyper}=-0.379$ ,  $hyper=0.032$ ,  $\beta_{super}=0.046$ ,  $p_{super}=0.606$ ).

The results have shown a significant impact of two dimensions of shopping environment on the entertainment is significant: design ( $\beta=0.564$ ,  $p=0.00$ ) and social environment ( $\beta=-0.266$ ,  $p=0.01$ ), but the negative impact of the latter on entertainment value is unexpected. The ambient dimension is not significantly linked to the entertainment value ( $p=0.486$ ). H4d is partially accepted because at least one of the dimensions of the store environment has a significant positive impact on entertainment. The impact of design on the entertainment value is more intense in hypermarkets compared to supermarkets. ( $\beta_{hyper}=0.87$ ,  $\beta_{super}=0.000$ ,  $\beta_{super}=0.405$ ,  $p_{super}=0.000$ ,  $pdiff=0.05$ ).

The impact of the social environment on the entertainment value is more intense in hypermarkets compared to supermarkets ( $\beta_{hyper}=-0.539$ ,  $\beta_{super}=0.001$ ,  $\beta_{super}=-0.007$ ,  $p_{super}=0.952$ ,  $pdiff=0.014$ ).

The impact of the store's environment on the shopping escapism value is significant for the store ambiance ( $\beta=0.148$ ,  $p=0.009$ ) and the social dimension ( $\beta=-0.127$ ,  $p=0.003$ ). The latter is surprisingly negatively linked to escapism which does not allow to fully accept H4c, along with the insignificant impact of design ( $p=0.54$ ). H4e is partially accepted.

The difference between the unconstrained and constrained models, regarding the parameters of the impact of the environment dimensions on escapism is significant only for the impact of social environment ( $pdiff=0.003$ ). Results show that the social dimension significantly decreases shopping escapism levels in hypermarkets ( $\beta=-0.514$ ,  $p=0.00$ ), while it is not significantly influent in supermarkets ( $p=0.266$ ). H5e is rejected.

Two dimensions of shopping value have non-significant impacts on the store's patronage intention: escapism ( $p=0.796$ ) and entertainment ( $p=0.711$ ). Contrarily, efficiency ( $\beta=0.142$ ,  $p=0.035$ ), visual appeal ( $\beta=0.279$ ,  $p=0.000$ ), and economic value ( $\beta=0.577$ ,  $p=0.000$ ) have positive effects. H6 is partially supported because H6d and H6e are rejected, while H6a, H6b and H6c are accepted.

The impact of two dimensions of shopping value on patronage is significantly different between the hypermarkets and supermarkets samples: efficiency ( $pdiff=0.002$ ) and escapism ( $pdiff=0.008$ ). The shopping efficiency's impact is more intense in hypermarkets shopping ( $\beta=0.363$ ,  $p=0.000$ ) because it does not have an impact in the supermarket situation ( $p=0.331$ ). H7a is accepted. Escapism impact is significant in supermarkets ( $\beta=0.246$ ,  $p=0.011$ ), contrary to hypermarkets ( $\beta=-0.056$ ,  $p=0.335$ ). H7e is rejected because the direction the moderating impact is the inverse of the expected one.

The moderating impact of store types is not significant regarding the links between the store's patronage intention, on the one hand, and economic ( $pdiff=0.818$ ), entertainment ( $pdiff=0.61$ ) as well as visual appeal ( $pdiff=0.477$ ) dimensions. H7b, H7c and H7d are rejected.

## 5. Discussion

The dimensions of the shopping environment have a positive impact on ISQ, except store's design, which does not have a significant effect. This result is however in line with Bitner (1992)'s conceptualization, which proposes that the "servicescape" influences the interaction between consumers and employees. Moreover, this outcome is quite similar to the findings of Baker et al. (2002), although the difference regarding which the retailer's environment dimensions influence the ISQ. Indeed, Baker et al. (2002) found that ISQ perceptions are influenced by the store employees and design cues, while our findings support the

impact of stores' ambient and social (employees) cues. The difference might be explained by the different methodologies. While our research is targeting real in-store shopping experiences, Baker et al.'s (2002) model was tested using a survey carried out after video visualizations of retailing stores visits. The auditory factors have been, in fact, questioned by these authors proposing to find new ways to use auditory cues in videotapes experiments.

The perceived shopping value dimension influenced by ISQ is the shopping economic value. This result is in line with the findings of prior studies (Hong et al., 2019; Baker et al., 2002). Baker et al. (2002) linked ISQ to merchandise (economic) rather than the economic value of the whole shopping experience economic value, as tested in our model. Hong et al. (2019) found that interaction quality and human quality have an impact on the whole experiential shopping value.

Efficiency shopping value is not significantly linked to ISQ. This new finding can be explained the nature of this value as explained by Holbrook (1999). Efficiency is indeed, an extrinsic, self-oriented and active value. The latter characteristic shows that this value is more depending on the active aspects and tasks done by the shopper rather than the other's (store employees) help. By the way, the ISQ and the store's ambient environment, neither in the global sample, nor in both separate hypermarkets and supermarkets models, do not significantly influence this value. The social environment is even an inhibitor of efficiency in supermarkets shopping situations, as its impact is negative.

The positive impact of the store design on economic shopping value is in line with a large number of retailing studies (e.g., Baker et al., 2002, Bakini Driss et al., 2009). The new information found in this research is that this impact is important in hypermarkets, but not significant in supermarkets. This might be explained by the importance of design cues leading to promotions in hypermarkets and sales leading signs. It would be very difficult for shoppers to find most of the possible bargains because of the very large surface of hypermarkets facilities.

Findings showed that the social and ambient environment in both types of stores do not influence the economic value. This is quite in line with many findings of Baker et al. (2002), who found no impact of store employees' perceptions on merchandise quality perceptions and monetary price perceptions that are underlying the perception of the economic value. Moreover, it is widely known by customers that prices and merchandise quality depend on the store procurement choices, rather than on the ambiance and on how employees look in the store.

Entertainment shopping value, which is hedonistic, is not influenced by store's ambient cues. It is quite unexpected and different from the findings of previous studies (Bakini Driss et al., 2009; Babin & Attaway, 2000).

This is explained by the frequent and repetitive nature of the grocery shopping experience, which corresponds to the motivation of most hypermarkets and supermarkets visitors. Moreover, the ambiance of supermarkets and hypermarkets seems to be not well studied by managers. The survey interviewers noticed that music is not played all the time. Often, the same song is going on in the same hypermarket. They remarked also that numerous of stores simply connected on a local music radio station.

The store patronage intention is influenced by its visual appeal, shopping efficiency and economic values, while escapism and entertainment show non-significant impacts. This is partially in accordance with the results of Babin and Attaway (2000) to the extent that intrinsic and extrinsic shopping values enhance the share of customers. These results are in line with the multi-dimensional perspective of perceived shopping value (Garrouch et al., 2020, 2012; Stael et al., 2004; Babin & Attaway, 2000; Choi & Park, 2018). The only unexpected non-significant link is between shopping escapism and entertainment, on the one hand, and store patronage intention on the other hand. Indeed, this is not in line with the results of Lee et al. (2019). The nature of the purchase context, which is generally ordinary and consists mostly of mere grocery shopping, makes it difficult to rely on escapism and entertainment as a real trigger of patronage intention.

Regarding the moderating effect of the store type on the relationship between shopping value and patronage intention, the impact of efficiency on patronage is significantly moderated by the store type. Indeed, the efficiency shopping value has a significant impact in hypermarkets, while its effect is non-significant in supermarkets. This can be explained by the effort that is spent to shop in hypermarkets, which are geographically more distant than supermarkets. The latter are an easy choice because they exist in a large number in many locations in the same city. In order to check if the shopping trip is more interesting than in any next-door supermarket, the effort spent to shop in hypermarkets will be weighted with the outcomes received.

## 6. Conclusion

The purpose of this research was to compare and verify a comprehensive model of the impact of the shopping environment on patronage intention in supermarkets and hypermarkets. The model links store environment to ISQ, experiential shopping value and stores' patronage intention.

Results show that the store's environmental cues directly create many shopping value dimensions, particularly the economic value, efficiency, and visual appeal (H4 wholly accepted). These values have an impact on the store's

patronage intention. The newness of our results come from detailing the impacts of the different extrinsic and intrinsic dimensions of value on patronage intentions. Indeed, only efficiency, economic and visual appeal values (H6a, H6b and H6c) showed a significant impact on the dependent variable.

The intensity and significance of the impact of shopping value, store environment and ISQ is moderated by the store type (H5 and H7 accepted), which constitutes an important contribution of this research.

A second originality stems from the verification of the store environment cues on each dimension of the experiential shopping value. Modeling the impact of ISQ on the experiential shopping value is another contribution of this study. ISQ is shown to be a mediator between store environment and perceived value, as H1 and H2 were accepted as a whole. Its impact is stable between the two store types (H3 is rejected) which show this variable can be of a strategic importance.

### 6.1. Managerial Implications

This research recommends incorporating, in a systematic way, the management of all retailer's environmental cues into the management of supermarkets and hypermarkets. The importance of the store design as a tool to create efficiency and economic value, via alleys organization and information signs, has to be considered, particularly in hypermarkets, where efficiency seems to be the most important value retaining customers. Supermarkets have to enhance the ISQ as a way to trigger the perception of the economic value of shopping in the store. Indeed, the availability and the helping attitude of supermarkets employees are key factors of the economic shopping value.

The store's visual appeal is also among the most important values of hypermarkets shopping, which makes it crucial for merchandising specialists to think about a design triggering the visual appeal in a continuous way.

The economic shopping value is still the most important factor preserving the store patronage intention in both types of retailers. It has to be the communication theme and it has to be enhanced through the store offers and in store communication through signs and design as well as employees' advice.

### 6.2. Limitations and Future Propositions

The store's social cues focused only on employees and did not involve the characteristics of other customers in the store or the shopper's companionship. It is thus suggested to include another dimension of the shopping environment, which is the interaction with other clients. It is also recommended to include store emotions as a mediator of the

store environment cues' impact. The comparison between hypermarkets and other kind of large-scale stores is also a path that can enrich the scientific knowledge in retailing.

## References

- Arnold, M. J., & Reynolds, K. E. (2009). Affect and Retail Shopping Behavior: Understanding the Role of Mood Regulation and Regulatory Focus. *Journal of Retailing*, 85(3), 308-320. <https://doi.org/10.1016/j.jretai.2009.05.004>
- Babin, B. J., & Attaway, J. S. (2000). Atmospheric affect as a tool for creating value and gaining share of customer. *Journal of Business Research*, 49(2), 91-99. [https://doi.org/10.1016/S0148-2963\(99\)00011-9](https://doi.org/10.1016/S0148-2963(99)00011-9)
- Babin, B. J., Chebat, J. C., & Michon, R. (2004). Perceived appropriateness and its effect on quality, affect and behavior. *Journal of Retailing and Consumer Services*, 11(5), 287-298. <https://doi.org/10.1016/j.jretconser.2003.09.002>
- Babin, L. A., Babin, B. J., & Boles, J. S. (1999). The effects of consumer perceptions of the salesperson, product, and dealer on purchase intentions. *Journal of Retailing and Consumer Services*, 6(2), 91-97. [https://doi.org/10.1016/S0969-6989\(98\)00004-6](https://doi.org/10.1016/S0969-6989(98)00004-6)
- Baker, J. (1986). The role of the environment in marketing services: The consumer perspective, in John A. Czepeil, Carlote A. Congram and James Shanahan (eds), *The Service challenge: Integrating for Competitive Advantage*, Chicago, IL: American Marketing Association, 79-84.
- Baker, J., Parasuraman, A., Grewal, D. & Voss, G.B. (2002). The Influence of multiple store environment cues on perceived merchandise value and patronage intentions. *Journal of Marketing*, 66(2), 120-141. <https://doi.org/10.1509/jmkg.66.2.120.18470>
- Bakini Driss, F., Ben Lallouna, Hafsia, H & Jerbi, S. (2009). Effet de la valeur perçue de magasinage sur le comportement du consommateur: Cas d'un point de vente spécialisé, *La Revue des Sciences de Gestion*, 238(3), 177-185. <https://doi.org/10.3917/rsg.237.0177>
- Bitner, M., J. (1992). Servicescapes: The impact of physical surroundings on customers and employers. *Journal of marketing*, 56(2), 57-72. <https://doi.org/10.1177/002224299205600205>
- Calabuig Moreno, F., Prado-Gascó, V., Hervás, J.C., Núñez-Pomar, J. & Añó Sanz, V. (2015). Spectator emotions: Effects on quality, satisfaction, value, and future intentions. *Journal of Business Research*, 68(7), 1445-1449. <https://doi.org/10.1016/j.jbusres.2015.01.031>
- Cho, Hyun-Jin (2012). The Effects of Service Quality on Shopping Value and Repatronage Intention: The Case of Specialty Coffee Shops. *Journal of Distribution Science*, 10(4), 21-28. <https://doi.org/10.15722/jds.10.4.201204.21>
- Choi, Y. J., & Park, J. W. (2018). A study on the shopping behavior of duty-free shop users. *Journal of Distribution Science*, 16(8), 39-50. <https://doi.org/10.15722/jds.16.8.201808.39>
- Darian, J.C., Wiman, A.R. & Tucci, L.A. (2005). Retail patronage intentions: the relative importance of perceived prices and salesperson service attributes. *Journal of Retailing and*



- Consumer Services*, 12(1), 15-23. <https://doi.org/10.1016/j.jretconser.2004.01.002>
- Diallo, M. F., Coutelle-Brillet, P., Rivière, A., & Zielke, S. (2015). How Do Price Perceptions of Different Brand Types Affect Shopping Value and Store Loyalty? *Psychology and Marketing*, 32(12), 1133-1147. <https://doi.org/10.1002/mar.20851>
- El-Adly, M. I., & Eid, R. (2016). An empirical study of the relationship between shopping environment, customer perceived value, satisfaction, and loyalty in the UAE malls context. *Journal of Retailing and Consumer Services*, 31, 217-227. <https://doi.org/10.1016/j.jretconser.2016.04.00>
- Fiore, A. M., & Kim, J. (2007). An integrative framework capturing experiential and utilitarian shopping experience. *International Journal of Retail & Distribution Management*, 35(6), 421-442. <https://doi.org/10.1108/09590550710750313>
- Garaus, M., & Wagner, U. (2016). Retail shopper confusion: Conceptualization, scale development, and consequences. *Journal of Business Research*, 69(9), 3459-3467. <https://doi.org/10.1016/j.jbusres.2016.01.040>
- Garrouch, K., Mzoughi, M. N., & Tritar, N. (2012). Impact of the perceived crowding, emotions, and perceived values on the return intention: evidence from Tunisia. *International Journal of Business and Emerging Markets*, 4(2), 143-159. <https://doi.org/10.1504/ijbem.2012.046238>
- Garrouch, K., Mzoughi, M.-N., & Chaieb, S. (2020). An integrative model of the impact of the store environment in supermarkets and hypermarkets. *Recherches En Sciences de Gestion*, 138, 185-212. <http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=145747859&site=ehost-live>
- Goić, M., Levenier, C., & Montoya, R. (2021). Drivers of customer satisfaction in the grocery retail industry: A longitudinal analysis across store formats. *Journal of Retailing and Consumer Services*, 60, 102-105. <https://doi.org/10.1016/j.jretconser.2021.102505>
- Grewal, D., Baker, J., Levy, M., & Voss, G. B. (2003). The effects of wait expectations and store atmosphere evaluations on patronage intentions in service-intensive retail stores. *Journal of Retailing*, 79(4), 259-268. <https://doi.org/10.1016/j.jretai.2003.09.006>
- Holbrook, M.B. 1999. *Consumer Value. A framework for analysis and research*. Routledge, London.
- Hong, J. P., Kim, B. Y., & Oh, S. H. (2020). The perceived-experiential value and service quality of auto maintenance and repair service. *Journal of Distribution Science*, 18(1), 59-69. <https://doi.org/10.15722/jds.18.01.20201.59>
- Hu, H., & Jasper, C. R. (2015). The impact of consumer shopping experience on consumer channel decision. *Academy of Marketing Studies Journal*, 19(1), 213-224.
- Jiang, C., Rashid, R. M., & Wang, J. (2019). Investigating the role of social presence dimensions and information support on consumers' trust and shopping intentions. *Journal of Retailing and Consumer Services*, 51, 263-270. <https://doi.org/10.1016/j.jretconser.2019.06.007>
- Kamran-Disfani, O., Mantrala, M. K., Izquierdo-Yusta, A., & Martínez-Ruiz, M. P. (2017). The impact of retail store format on the satisfaction-loyalty link: An empirical investigation. *Journal of Business Research*, 77, 14-22. <https://doi.org/10.1016/j.jbusres.2017.04.004>
- Kang, M. J. (2020). A study on the effect of service quality, consumer empathy and shopping value on curation commerce satisfaction. *Journal of Distribution Science*, 18(6), 5-14. <https://doi.org/10.15722/jds.18.6.20206.5>
- Kim, E. (2012). Research on Practical Shopping Value and Consumer Attitudes on PB Products According to Perceived Quality. *Journal of Distribution Science*, 10(10), 35-43. <https://doi.org/10.15722/jds.10.10.201210.35>
- Kopp, S. W., & Langenderfer, J. (2014). Protecting appearance and atmospherics: Trade dress as a component of retail strategy. *Journal of Public Policy and Marketing*, 33(1), 34-48. <https://doi.org/10.1509/jppm.09.03>
- Lang, M., & Hooker, N. H. (2013). An empirical test of experiential shopping in food retailing. *British Food Journal*, 115(5), 639-652. <https://doi.org/10.1108/00070701311331553>
- Lee, J.S., Chun, S., & Choi, J. (2019). South Korean Consumers' Experiences and Underlying Shopping Mechanism of Black Friday. *Journal of Distribution Science*, 17(11), 63-72. <http://dx.doi.org/10.15722/jds.17.11.201911.63>
- Lee, H. J., & Yang, K. (2013). Interpersonal service quality, self-service technology (SST) service quality, and retail patronage. *Journal of Retailing and Consumer Services*, 20(1), 51-57. <https://doi.org/10.1016/j.jretconser.2012.10.005>
- Lehtinen, U. & Lehtinen, J. R. (1991). Two approaches to service quality dimensions. *The Service Industries Journal*, 11(3), 287-303. <https://doi.org/10.1080/02642069100000047>
- Lin, M. Q., & Chiang, Y. F. (2010). The influence of store environment on perceived experiential value and behavior intention. *Asia Pacific Management Review*, 15(2), 281-299. <https://doi.org/10.6126/APMR.2010.15.2.08>
- Mathwick, C., Malhotra, N., & Rigdon, E. (2001). Experiential value: Conceptualization, measurement and application in the catalog and Internet shopping environment. *Journal of Retailing*, 77(1), 39-56. [https://doi.org/10.1016/S0022-4359\(00\)00045-2](https://doi.org/10.1016/S0022-4359(00)00045-2)
- Mehrabian, A. & Russell J. (1974). *An approach to environmental psychology*. MIT Press, Cambridge.
- Miniero, G., Rurale, A., & Addis, M. (2014). Effects of Arousal, Dominance, and Their Interaction on Pleasure in a Cultural Environment. *Psychology and Marketing*, 31(8), 628-634. <https://doi.org/10.1002/mar.20723>
- Stoel, L. Wickliffe V. & Lee K.H. 2004. Attribute beliefs and spending as antecedents to shopping value. *Journal of Business Research*, 57(1), 1067-1073. [https://dx.doi.org/10.1016/S0148-2963\(03\)00016-X](https://dx.doi.org/10.1016/S0148-2963(03)00016-X)
- Van Camp, D., Hooker, N.H. & Souza-Monteiro, D.M. (2010). Adoption of voluntary front of package nutrition schemes in UK food innovations. *British Food Journal*, 112(6), 580-591. <https://doi.org/10.1108/00070701011052673>
- Vongurai, R. (2021). Factors Influencing Experiential Value Toward Using Cosmetic AR Try-on Feature in Thailand. *Journal of Distribution Science*, 19(1), 75-87. <https://doi.org/10.15722/jds.19.1.202101.75>
- Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(3), 2-22. <https://doi.org/10.1177/002224298805200302>

## Appendixes

**Appendix 1:** Regression Weights and significance in three models: global, hypermarket and supermarket.

Dependent	Independent	Estimate	P	Estimate h	p.	Estimate s	p	P-difference
ISQ	Ambient	.130	.01	0.12	0.18	0.07	0.27	0.681
	social	.521	***	0.614	***	0.341	***	0.134
	physical	.068	.300	-0.108	0.481	0.158	0.043	0.16
Economic	social	.109	.182	0.154	0.323	-0.025	0.803	0.355
	Ambient	.068	.253	-0.175	0.092	0.064	0.393	0.07
	ISQ	.250	***	0.086	0.325	0.539	***	0.006
	Design	.152	.026	0.679	***	0.008	0.925	0.001
Efficiency	Social	-.115	.064	-0.192	0.11	-0.171	0.025	0.009
	Design	.293	***	0.612	***	0.302	***	0.072
	ISQ	.011	.793	-0.007	0.913	-0.054	0.55	0.695
	Ambient	-.028	.529	-0.206	0.013	-0.047	0.416	0.123
Entertainment	design	.564	***	0.87	***	0.405	***	0.05
	Ambient	.060	.468	-0.2	0.091	0.185	0.073	0.123
	Social	-.266	.010	-0.539	0.001	-0.007	0.952	0.014
Escapism	Physical	-.052	.540	-0.095	0.605	-0.169	0.112	0.636
	Ambient	.153	.030	0.442	***	-0.002	0.979	0.003
	social	-0.19	0.04	-0.513	***	-0.132	0.266	0.003
PATRONAGE BEHAVIOR	Efficiency	.142	.035	0.363	***	-0.122	0.331	0.002
	Escapism	-.011	.796	-0.056	0.335	0.246	0.011	0.008
	Economic	.577	***	0.448	***	0.481	***	0.818
	Entertainment	.042	.264	0.022	0.711	0.07	0.283	0.61
	Visual Appeal	.279	***	0.352	***	0.245	0.038	0.477
Visual Appeal	Design	.462	***	0.712	***	0.438	***	0.113
	Social	.062	.379	0.032	0.773	0.046	0.606	0.02
	Ambient	.152	.007	-0.012	0.879	0.208	0.007	0.054