The evoking power of servicescapes: Consumers' inferences of manipulative intent following service environment-driven evocations

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ABSTRACT

Interactions between consumers and the servicescape favor value creation. To this regard, the potential influence of the servicescape on consumer service experience is of most importance. While consumers have been perceived as active and willing to co-create value, this research shows that this is not the case when the servicescape triggers inferences of manipulative intent (IMI) and consumers consequently exhibit lower shopping intentions. In particular, in a context where the literature has overlooked how incongruency may affect IMI, this research focuses on how consumers react when the evocations driven from the servicescape contradict product properties. More specifically, this research investigates how discrepancies between (1) the actual properties of the merchandise and (2) those that are driven by the servicescape lead to IMI and subsequent shopping intentions. Results from an experiment demonstrate that when the evoked and actual properties of the merchandise are incongruent, consumers tend to infer that the servicescape is manipulative, resulting in a decrease in shopping intentions.

1. Introduction

Recent service research considers the interactive process of value co-creation as one of the key priority areas to enhance extant knowledge of the field of services (Ostrom, Parasuraman, Bowen, Patricio, & Voss, 2015; Vargo & Lusch, 2004, 2008). In the service provision process, value is fundamentally co-created by multiple actors – always including the beneficiary – which all combine to produce and enhance the service experience. Within this process, consumers are no longer considered as passive; rather, they are conceptualized as beneficiaries and resource integrators, as proposed in the service-dominant logic literature (Lusch & Vargo, 2014; Vargo & Lusch, 2004, 2008, 2016).

This fundamental change in perspective, however, raises the issue of the consumers' participation in the co-creation process or, as Ostrom et al. (2015, p. 139) put it, another question: what happens if they "resist performing their expected co-production roles"? Though such concerns have been envisioned in the context of business-to-business (B2B) service systems (Breidbach & Maglio, 2016; Santos & Spring,

2015), or in B2C employee- and technology-related issues (Ostrom et al., 2015), research priorities must address how the coordination efforts (that the co-creation process requires) should be achieved, and how the necessary resources to enhance the service experience should be integrated.

Among the resources for value co-creation, servicescapes – i.e., environments that form the particular setting and atmosphere where the service experience is produced and consumed (Bitner, 1992) – play a crucial role (Nilsson & Ballantyne, 2014; Spence, Puccinelli, Grewal, & Roggeveen, 2014). Within various forms of servicescapes and despite the growing number of possibilities to engage relationships with consumers (Ostrom et al., 2015), stores remain the privileged physical locations where services are offered and delivered (Dagger & Danaher, 2014). Hence, in the light of a goods-centered view, previous literature shows how retailers pay great attention to design in-store environments aimed at providing pleasant shopping experiences, at inducing positive mood, and enhancing consumers' emotions, evaluations, and purchasing behavior (Baker, Grewal, & Parasuraman, 1994; Donovan, Rossiter, Marcoolyn, & Nesdale, 1994; Kaltcheva & Weitz, 2006; Spence et al., 2014). Therefore, servicescape variables – tangible and intangible ambient elements such as lighting, music, scent, and temperature – can be conceptualized as resources that participate in value

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propositions for specific segments of beneficiaries (Chandler & Lusch, 2015). So doing, a service-providing actor is able to exchange resources with specific consumer segments and, in turn, to draw from this exchange a "strategic benefit" (Vargo & Lusch, 2016, p. 7).

Yet, in spite of the ability of servicescapes to co-create value with and generate positive outcomes for the consumer, some studies challenge such systematic benefits. For example, Mattila and Wirtz (2006) show that the degree to which a servicescape is perceived as pleasant (vs. unpleasant) varies depending on its capacity to match the customers' target-arousal level. In other words, since being "always uniquely and phenomenologically determined by the beneficiary" (Vargo & Lusch, 2016, p. 6), value may not be clearly perceived in some cases. From a more cognitive perspective, Lunardo and Roux (2015) stress how highly arousing servicescapes can trigger inferences of manipulative intent (IMI), thus negatively affecting pleasure and approach behavior. These IMI are reflexive processes by which consumers think that a market agent "is attempting to persuade [them] by incongruent, unfair, or manipulative means" (Campbell, 1995, p. 228), here a pleasant servicescape. By giving meaning to their experiences (Wentzel, Tomczak, & Herrmann, 2010), consumers feel that ambient elements such as lighting, music, scent, and temperature may be used by retailers purposely and primarily for their own benefit (Lunardo & Roux, 2015), thus compromising the value co-creation. In the same vein, and far from the ideal view that underlies a service-centered view of value co-creation (Vargo & Lusch, 2004, 2008), Lunardo and Mbengue (2013) suggest that incongruency – and specifically, the discrepancies between the evoked and actual properties of the in-store merchandise – may lead to IMI, and subsequently to negative consequences on trust and attitude. For example, a garage using a new-car smell to increase the perceived quality of second-hand cars may prompt customers to think that the garage owner is manipulative, leading to a decrease in their trust toward that service provider.

Although the servicescape may affect consumer behavior and value assessment, a limitation in the literature lies in that Lunardo and Mbengue (2013) only focus on the impact of IMI on shopping intentions, thus failing to explain the role of incongruency in the mechanism of inference formation. As incongruency is likely to affect the service experience and to jeopardize the value creation process, this research aims to address this gap. More precisely, this research examines how incongruency creates disfluency, i.e., the metacognitive experience of arduously performing a mental action (Winkielman, Schwarz, Fazendeiro, & Reber, 2003), which then leads to IMI and lower shopping intentions.

To this end, and in line with prior conceptualizations, the paper first builds on the congruity theory (Mandler, 1982) and the role of disfluency in the relationship between incongruency and IMI. Section 2 concludes with the resulting formal hypotheses. In Section 3, the experiment is presented and the relationships are tested. Results confirm that servicescape-driven evocations that are not supported by the merchandise properties lead to incongruency. This incongruency then causes disfluency, resulting in an increase in IMI and a decrease in subsequent shopping intentions. Findings also support the mediating role of disfluency between incongruency and IMI. Overall, these results advance service management decision-making whose implications for value creation in marketing research and practice are finally discussed.

2. Theoretical background

2.1. Servicescapes and congruency

Servicescapes exert positive effects on consumers' responses (e.g., Brüggen, Foubert, & Gremler, 2011; Michon, Chebat, & Turley, 2005; Nilsson & Ballantyne, 2014; Turley & Milliman, 2000). These effects result from a holistic perception of the environment whereby consumers process all discrete stimuli in the servicescape as a whole.

Hence, an important variable that comes into play regarding consumers' perception of servicescapes is the degree of fit or congruency between their different components (e.g., Beverland, Lim, Morrison, & Terziovski, 2006; Eroglu, Machleit, & Chebat, 2005; Mattila & Wirtz, 2001; Spangenberg, Crowley, & Henderson, 1996; Spangenberg, Grohmann, & Sprott, 2005).

Though congruency exerts positive effects (unlike incongruency that is supposed to cause negative effects), three kinds of congruency can be distinguished. The first refers to the match (versus mismatch) between the components of the servicescape. For example, Mattila and Wirtz (2001) show that the congruency between the arousal levels of scent and music exerts a positive impact on consumers' reactions: pleasure, satisfaction, and impulse purchases. The second type of congruency pertains to the match (versus mismatch) between stimuli from the servicescape and consumers' characteristics. For instance, Morrin and Chebat (2005) argue that ambient cues that are (vs. are not) congruent with consumers' affectively or cognitively oriented shopping styles are more effective at enhancing their subsequent responses. The third type of congruency refers to the degree of fit between stimuli and merchandise (Areni & Kim, 1993; Mitchell, Kahn, & Knasko, 1995; North, Hargreaves, & McKendrick, 1999; Schlosser, 1998; Spangenberg, Sprott, Grohmann, & Tracy, 2006; Spangenberg et al., 1996). Relying on the power of servicescapes to drive evocations, Orth and Bourrain (2008) indicate that the congruency between the servicescape-driven evocations and the merchandise properties has positive outcomes, while incongruency leads to negative consequences. Similarly, Mitchell et al. (1995) demonstrate that ambient olfactory cues influence consumers' information processing and product choice, such that congruent (vs. incongruent) scents enhance consumer judgments about the merchandise.

Overall, previous research emphasizes the positive effects of congruency and the negative influence of incongruency on consumer behavior. Yet, the potential underlying mechanisms of the negative effects of incongruency remain understudied (North et al., 1999; Spangenberg et al., 2006).

2.2. Incongruency, cognitive elaboration, and disfluency

Mandler's (1982) theory of congruity provides an appropriate framework for hypothesizing the positive effects of congruency between stimuli from the servicescape and the merchandise. Widely used in research on servicescapes (e.g., Eroglu et al., 2005; Meyers-Levy & Zhu, 2010; Peck & Childers, 2008; Spangenberg et al., 2006), this theory posits that congruity – or congruency (Kressmann et al., 2006) – leads to favorable responses because individuals prefer objects that conform to their expectations and require low levels of cognitive elaboration. In line with this theorization, congruent servicescapes induce positive responses by providing shoppers with environments easy to process.

By contrast, incongruency may prompt attention, need for understanding, and increased cognitive elaboration, which are likely to negatively affect evaluations (Heckler & Childers, 1992; Meyers-Levy & Tybout, 1989). Therefore, incongruent servicescapes, even unintentionally produced by retailers, might raise consumers' attention and prompt corrective mechanisms. For example, Bosmans (2006) shows that in-store ambient scents that are congruent with the merchandise positively affect consumers' evaluations. Conversely, when incongruent, ambient scents become more salient and have a negative effect because they result in cognitive elaboration and lead consumers to engage in a conscious process to correct for their influence. Thus, when there is some discrepancy between the actual merchandise properties and the evocations driven by the servicescape, consumers may question the latter. Based on the literature, we argue that such a discrepancy may, respectively, affect (1) incongruency, or the perceived lack of fit between merchandise

and the servicescape (Orth & Bourrain, 2008; Spangenberg et al., 2006); (2) disfluency, or the cognitive difficulty to analyze complex information (Herrmann, Zidansek, Sprott, & Spangenberg, 2013; Orth & Wirtz, 2014); and (3) IMI, or the belief that market agents are using manipulative means (Campbell, 1995; Lunardo & Mbengue, 2013). Therefore:

H1. The actual properties of the merchandise moderate the effects of servicescape-driven evocations on incongruency. Specifically, when the merchandise does not (vs. does) possess the properties that are evoked through the servicescape, congruency decreases (vs. increases).

H2. The actual properties of the merchandise moderate the effects of servicescape-driven evocations on disfluency. Specifically, when the merchandise does not (vs. does) possess the properties that are evoked through the servicescape, disfluency increases (vs. decreases).

H3. The actual properties of the merchandise moderate the effects of servicescape-driven evocations on IMI. Specifically, when the merchandise does not (vs. does) possess the properties that are evoked through the servicescape, IMI increase (versus decrease).

Further, research suggests that in the situation where the servicescape evokes properties that the product does not possess, incongruency may lead people to engage in higher levels of cognitive elaboration (Heckler & Childers, 1992; Mandler, 1982). Therefore, incongruency may induce disfluency since incongruent (vs. congruent) environments are more difficult to process, and complex interior servicescapes lead to higher disfluency (Herrmann et al., 2013; Orth & Wirtz, 2014).

In addition, since consumers often use the experience of fluency as a diagnostic cue for judgments (Alter & Oppenheimer, 2009), disfluency may then impact IMI. Previous research brings support to such hypothesis by showing that fluently (vs. disfluently) processed stimuli are perceived as more believable (Reber & Schwarz, 1999; Unkelbach, 2006, 2007). This suggests that, when the discrepancy between the servicescape-evoked and the actual merchandise properties leads to disfluency, consumers may question the reality of servicescape-driven evocations. In sum, we thus posit that, when the servicescape evokes some properties that the merchandise does not actually possess, incongruency may affect disfluency, which may in turn play a mediating role between incongruency and IMI. Consequently:

H4. When the merchandise does not possess the properties evoked by the servicescape, incongruency mediates the effect of servicescape-driven evocations on disfluency. Such a mediating effect of congruency is unlikely when the merchandise actually possesses the servicescape-driven evocations.

H5. When the merchandise does not possess the properties evoked by the servicescape, disfluency mediates the effects of servicescape-driven evocations on IMI. Such a mediating effect of disfluency does not hold when the merchandise possesses the properties evoked by the servicescape.

Finally, because previous research indicates that IMI exert a negative effect on attitude and play a mediating role between the particular properties of the servicescape and the consumer's intentions (Lunardo & Mbengue, 2013), disfluency between the servicescape-driven evocations and the actual product properties may also lead to lower shopping intentions. Hence:

H6. IMI mediate the effects of disfluency on consumers' shopping intentions.

These hypotheses lead to the following theoretical model that is tested in study 2.

3. Testing the model

3.1. Method

3.1.1. Procedure and sample

Consumers examine physical evidence to appraise service quality in their purchase decision-making process (Lovelock & Wirtz, 2011). This is all the more so when the service conditions relate to experiential consumption such as food and out-of-home catering, a context being deemed particularly appropriate for this study.

Precisely, a servicescape evoking organic food (vs. not) and a menu listing organic food (vs. not) were chosen for the treatment conditions. In France where the study was conducted, although the growing popularity of organic food is obvious, especially in the media and food experts' discourse, the number of true organic restaurants remains very low. For instance, among the 166,000 French restaurants, only 16% offer some organic food in their menus, such as wine or other pre-packaged products.[1] By contrast, only 143 restaurants really meet specifications regarding the production and transformation of organic food.

Hence, the attractiveness of organic products may lead some restaurateurs to try to gain more customers by designing servicescapes that evoke naturalness and properties which the food does not possess. This design resulted in a 2 (servicescape evoking organic food: yes vs. no) × 2 (organic food in the menu: yes vs. no) between-subjects experiment.

Respondents were contacted by e-mail using a snowball technique (i.e., they were asked to encourage friends and relatives to participate), and randomly assigned to one of the four experimental conditions. Respondents were assured of confidentiality, and were not compensated for their participation. This resulted in a sample of 113 individuals (average age: 35.6 years, SD = 14.6), in which 61.3% were professionals from diverse fields.

Following previous research on servicescapes (e.g., Kaltcheva & Weitz, 2006; Lunardo & Roux, 2015; Mattila & Wirtz, 2001), the experiment was based on a scenario approach using pictures. The scenario described a hypothetical visit to a town center to select a restaurant for lunch. Respondents were asked to read the following: "Imagine that you are in the town center looking for a restaurant for lunch. After a few minutes walking, you spot a restaurant and go inside. Here are four pictures of this restaurant. Please look carefully at them for about 30 seconds." To control for any potential bias in this experiment, the four pictures corresponding to various servicescape conditions were of the same size (8.5 cm × 11.5 cm), in color, and did not show any people or logos. The properties evoked through the servicescape and those of the menu were manipulated between subjects. After viewing the four pictures evoking the restaurant servicescape on their computer screen, respondents read the following: "Once you are inside the restaurant sitting at a table, a waiter brings you the menu of the day. Please look carefully at the menu for about 30 seconds imagining that you choose it for lunch." After being subjected to both the atmosphere's and the menu's conditions, respondents were asked to answer the questionnaire.

3.1.2. Stimuli selection

A pretest with 38 undergraduate students helped select the stimuli for the two different servicescapes. To ensure that the servicescapes would contrast in evoking organic food, but not regarding their perceived quality, 10 pictures of restaurants were first chosen. As in the experiment, the selected pictures were of the same size, in color, and did not show any people or logos. During the pretest, participants viewed the 10 pictures and were asked to answer a two-item question, measuring the evoked organic properties of the food served inside: "From what I see of this restaurant, I…": "expect meals to be prepared with organic

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[1] http://www.natura-sciences.com/agriculture/restaurants-bio572.htm

ingredients", "expect meals to be prepared with natural products that do not contain any chemical substance"; $r = 0.75$, $p < 0.001$). Respondents were also asked to rate the quality of each servicescape using a one-item measure ("I found the atmosphere pleasant"). A single item was preferred to a multi-item measure in order to keep this 10×1 within-subject pretest short. All questions were rated on seven-point scales.

A repeated-measures multivariate analysis of variance provided the test for significant differences across the atmospheres' properties evoking organic food (multivariate $F(9,18) = 19.71$, $p < 0.001$). Indeed, some servicescapes appeared to evoke organic food, significantly more than others. Restaurant 2 proved to be the most evocative of organic food ($M = 4.75$, SD $= 1.25$) while restaurant 7 appeared the least ($M = 2.23$, SD $= 1.20$). A paired t-test revealed that the two means were different ($p < 0.001$). Another paired test was conducted to ensure that the servicescapes of restaurants 2 ($M = 5.37$, SD $= 1.26$) and 7 ($M = 4.47$, SD $= 1.50$) did not significantly differ in quality ($p > 0.10$). Restaurants 2 and 7 were selected for the experiment, and four different pictures of each restaurant were extracted from the Internet (Appendix A).

Turning to the actual product properties, two mock menus were professionally designed (Appendix B). In order to avoid any bias regarding attitudes toward the meal, the menus were similar in content, and only their properties were manipulated. Specifically, the menu that did not list organic products included a pasta salad, a burger with fries, and a strawberry cake. The organic menu provided a salad, a vegetable burger with homemade fries, and strawberry yogurt. In addition, since color contributes to evoke product attributes (Spence, Levitan, Shankar, & Zampini, 2010), the organic menu was manipulated by using colors likely to evoke naturalness, such as brown, green, and white, while the non-organic menu had a black and orange background (Mahnke, 1996).

3.1.3. Measures

After a few instructions and being exposed to the scenario, participants responded to Likert-scales measures derived from those used in related research and adjusted to fit the specific context of this study. To inhibit response bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), shopping intentions were measured at the beginning of the questionnaire, followed by the measures of IMI, disfluency, congruency, and then the measures included for manipulation check purposes.

Precisely, participants rated their shopping intentions using the six-item scale by Kaltcheva and Weitz (2006; $\alpha = 0.94$). IMI were measured with the Campbell's (1995) scale, which was previously by Lunardo and Mbengue (2013) in the field of retailing. The negatively framed item was dropped because of its negative effect on reliability (Herche & Engelland, 1996). The scale was reliable ($\alpha = 0.89$).

Next, participants indicated their subjective experience of disfluency by rating the ease with which they processed the message generated by the combination of the atmosphere and the menu on a four-item semantic differential scale (Fang, Singh, & Ahluwalia, 2007; "very difficult to understand/imagine/process", and "required a lot of effort"; "very easy to understand/imagine/process", and "required very little effort"; $\alpha = 0.90$. As this scale measures fluency, the items were reversed so that higher scores indicated higher levels of disfluency. Participants then rated the congruency of the servicescape based on three items adapted from those used by Demoulin (2011) ("This atmosphere is appropriate for the meals proposed in the menu"; "Given the content of the menu, this atmosphere suits well"; "I'm not surprised to find those meals in a restaurant with such an atmosphere"; $\alpha = 0.89$). Finally, two items were used to check the organic properties of the menu ("From what I see of the menu, I would say that…": "meals are prepared with organic ingredients", "meals are prepared with natural products that do not contain any chemical substance"; $\alpha = 0.93$).

Besides good reliabilities, the average variance extracted for each construct exceeds the squared correlation between constructs

Table 1
Squared correlations, AVE, average means, and standard deviations.

	1	2	3	4	Mean (SD)
Congruency (1)	0.82				3.99 (1.80)
Disfluency (2)	0.18	0.70			3.12 (1.62)
IMI (3)	0.13	0.03	0.76		2.83 (1.49)
Shopping intentions (4)	0.17	0.09	0.15	0.79	4.10 (1.65)

$^{**}p < 0.01$.
The average variance extracted (AVE) for each construct is on the diagonal.

(Table 1), providing support for the discriminant validity of the measures (Fornell & Larcker, 1981). Together, these analyses indicate that all measures have satisfying psychometric properties.

3.2. Results

3.2.1. Manipulation checks

Analyses of variance were used to test the effectiveness of the manipulation of the organic property of the menu. Participants in the organic menu condition rated the menu as significantly more organic ($M_{\text{Organic Menu}} = 4.93$) than respondents in the non-organic menu condition ($M_{\text{Non-organic Menu}} = 2.76$; $F(1, 111) = 40.41$, $p < 0.001$). The manipulation therefore appears effective.

3.2.2. Testings of hypotheses about the interacting effects of servicescape-driven evocations and merchandise properties

H1–H3 were tested using two-way analyses of variance (ANOVAs). The properties evoked by the servicescape (organic food vs. non-organic food), the actual properties of the merchandise (organic food vs. non-organic food), and their interaction were used to respectively predict congruency, disfluency, and IMI.

In regard to H1, results reveal the predicted significant interaction ($F(1, 111) = 12.779$, $p < 0.001$). More accurately, in the condition where the servicescape evoked organic properties, congruency is higher when the merchandise is organic ($M = 4.57$) than non-organic ($M = 2.74$, $t = -4.66$, $p < 0.01$; see Table 2). No difference is observed in the context of a servicescape that does not evoke organic properties ($M_{\text{Organic menu}} = 4.01$, $M_{\text{Non organic menu}} = 4.45$, $t = 0.86$, $p > 0.10$). These findings support H1.

Turning to H2, results reveal a significant interaction between the properties evoked through the servicescape and the actual merchandise properties on disfluency ($F(1, 111) = 7.10$, $p < 0.01$). In the context of a servicescape evoking organic food, the difference in disfluency across the non-organic menu condition ($M = 4.03$) and the organic menu condition ($M = 2.90$) is significant ($t = -2.96$, $p < 0.01$). No difference is observed in the setting where the servicescape does not evoke organic food ($M_{\text{Non-organic menu}} = 2.58$, $M_{\text{Organic menu}} = 3.04$; $t = 0.98$, $p > 0.10$). These results support H2.

The same pattern emerges when testing H3 and the moderating role of the actual merchandise properties on the relationship

Table 2
Cell means and standard deviations.

	Non-organic-food-evoking servicescape		Organic-food-evoking servicescape	
	Non-organic menu	Organic menu	Non-organic menu	Organic menu
Congruency*	4.45 (1.91)	4.01 (1.76)	2.74 (1.58)	4.57 (1.48)
IMI	2.79 (1.46)	2.95 (1.34)	3.72 (1.56)	2.14 (1.24)
Disfluency	2.58 (1.43)	3.04 (1.83)	4.03 (1.71)	2.90 (1.29)
Attitude	3.47 (1.97)	4.33 (1.44)	4.01 (1.61)	5.35 (1.39)
Cell sizes	24	27	26	35

* A low value indicates a high level of incongruency.

between the evoked properties and IMI. Precisely, the results show a significant interaction ($F(1, 111) = 10.41$, $p < 0.01$) whereby, when the servicescape evokes organic food, IMI are higher when the menu is not organic ($M = 3.72$) than when it is ($M = 2.14$). No difference is found in the condition where the servicescape does not evoke organic food ($M_{Non\text{-}organic\ menu} = 2.95$, $M_{Organic\ menu} = 2.79$; $t = -0.39$, $p > 0.10$). These results thus support H3.

3.2.3. Testings of hypotheses about the mediating roles of congruency, (dis)fluency and IMI (H4 to H6)

H4 posits that, when the merchandise does not (versus does) possess properties evoked by the servicescape, congruency mediates the effects of the evoked properties on disfluency. As such, H4 suggests that the actual merchandise properties moderate the mediating effects of congruency. To test this hypothesis, a moderated-mediation analysis was conducted using the PROCESS macro (Model 7; 1000 bootstrap samples) developed by Hayes (2012). The organic (versus non-organic) servicescape-driven evocations were included as the independent variable, congruency as the mediator, disfluency as the dependent variable, and the organic (versus non-organic) properties of the merchandise as the moderator. The results reveal a significant moderated mediation, with a confidence interval of the index of moderation mediation excluding 0 (-1.59; -0.33) (Zhao, Lynch, & Chen, 2010). Precisely and as expected, when the menu is not organic and does not possess the corresponding properties evoked by the servicescape, congruency exerts a positive mediating effect between the servicescape-driven evocations and disfluency (0.24; 1.19). This indicates that servicescape-driven evocations that are not consistent with the actual properties of the merchandise lead to lower congruency and higher disfluency. Conversely, there is no mediating effect of congruency when the menu is organic and the merchandise conforms to what is evoked by the servicescape (-0.57; 0.06; see Fig. 2a). Of note, no direct effect of servicescape-driven evocations on disfluency is observed ($\beta = 0.40$, $t = 1.43$, $p > 0.10$). These results support H4. (See Fig. 1.)

H5 predicts that, when the merchandise does not (versus does) possess properties evoked by the servicescape, disfluency mediates the effect of these evoked properties on IMI. As previously mentioned, the moderated-mediation H5 was tested using the PROCESS macro (Model 7; 1000 bootstrap samples). As anticipated, results reveal a significant index of moderated mediation (-0.84; -0.01), indicating that disfluency exerts a mediating effect between the servicescape-driven evocations and IMI, with this mediating effect being moderated by the actual properties of the merchandise. Precisely, results show that in the non-organic menu condition, disfluency exerts a positive mediating effect on IMI (0.01; 0.65). In other words, in a situation where the servicescape drives positive evocations that the merchandise does not support, disfluency increases, leading to higher IMI. This mediating effect of disfluency is not observed when the menu is organic and the merchandise consistent with the servicescape-driven evocations

(-0.26; 0.11; see Fig. 2b). Of note, no direct effect of servicescape-driven evocations on disfluency is observed ($\beta = -0.17$, $t = -0.58$, $p > 0.10$). These results support H5.

Finally, H6 and the mediating role of IMI on the relationship between disfluency and shopping intentions were examined with Hayes' PROCESS macro (Model 4; 1000 bootstrap samples). The results reveal a negative indirect effect of disfluency on shopping intentions, with a confidence interval excluding 0 (-0.20; -0.01), thus supporting H6. More precisely, disfluency positively affects IMI ($\beta = 0.17$, $t = 2.01$, $p < 0.05$), which in turn decrease shopping intentions ($\beta = -0.38$, $t = -4.01$, $p < 0.001$).

4. General discussion

4.1. Theoretical implications

Drawing on the service-dominant logic and servicescape literature, Mandler's (1982) congruity theory, and an empirical study, the present research offers three theoretical contributions. The first relates to the identification of the conditions in which the servicescape can lead consumers to resist and infer manipulative intent. While previous research has focused on the outcomes of IMI (Lunardo & Mbengue, 2013; Lunardo & Roux, 2015), the conditions which cause IMI has remained under-theorized, except by Lunardo and Roux (2015) who identified the role of the arousing properties of the servicescape. The current research adds to the literature by highlighting how IMI derive from the disfluency caused by the discrepancy between the servicescape-driven evocations and the actual merchandise properties. This result enriches the S-D logic literature that considers the consumer as an active resource integrator within service provision processes (Lusch & Vargo, 2014; Vargo & Lusch, 2004, 2008, 2016). However, as this study shows, consumers are not always able or willing to actively and positively react to retailers' value propositions. While this phenomenon has been recently evidenced in studies on B2B service systems (Breidbach & Maglio, 2016; Santos & Spring, 2015), it has been overlooked in the B2C literature. Hence, the current study contributes to the literature by demonstrating why consumers may refuse to participate in value co-creation processes. The findings help fill this gap by showing that a lack of congruency between the servicescape-driven evocations and the actual merchandise can lead consumers to perceive the retailer or service provider as manipulative, making them less willing to 1/participate in value creation and to 2/exhibit positive shopping intentions.

The second theoretical contribution concerns the cognitive dimension of consumer behavior which has been left aside in the literature on servicescapes. This body of literature mainly considers the servicescape as a source of pleasure and experience (Bitner, 1992; Donovan et al., 1994; Kaltcheva & Weitz, 2006), and situates consumers as passive recipients who are under the unconscious influence of their servicescape-driven emotions. In line with Chebat and Michon (2003, p. 537) who bemoan the heavy focus on "the emotional effects of the environment to the detriment of the study of the meaning of the environment", we adopt a cognitive view of the consumer's perceptions of the servicescape. In this respect, the results of this study are consistent with a conceptualization of the consumer as cognitively active, complying with the service-dominant logic (Lusch & Vargo, 2014; Vargo & Lusch, 2004). Arguing that consumers deploy interpretive strategies to make sense of their environment, this approach assumes that they develop cognitive responses to the servicescapes. By showing how they decode their environment, this approach adds to the understanding of cognitive mechanisms by which inferences of manipulative intents are likely to occur. Of note, this work also matches up with research in environmental psychology that conceptualizes the influence of the servicescape as a three-step process in which stimuli affect cognitions that, in turn, affect behavior (Donovan & Rossiter, 1982; Mehrabian & Russell, 1974).
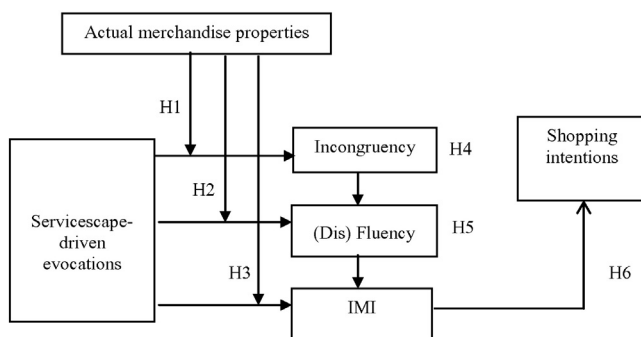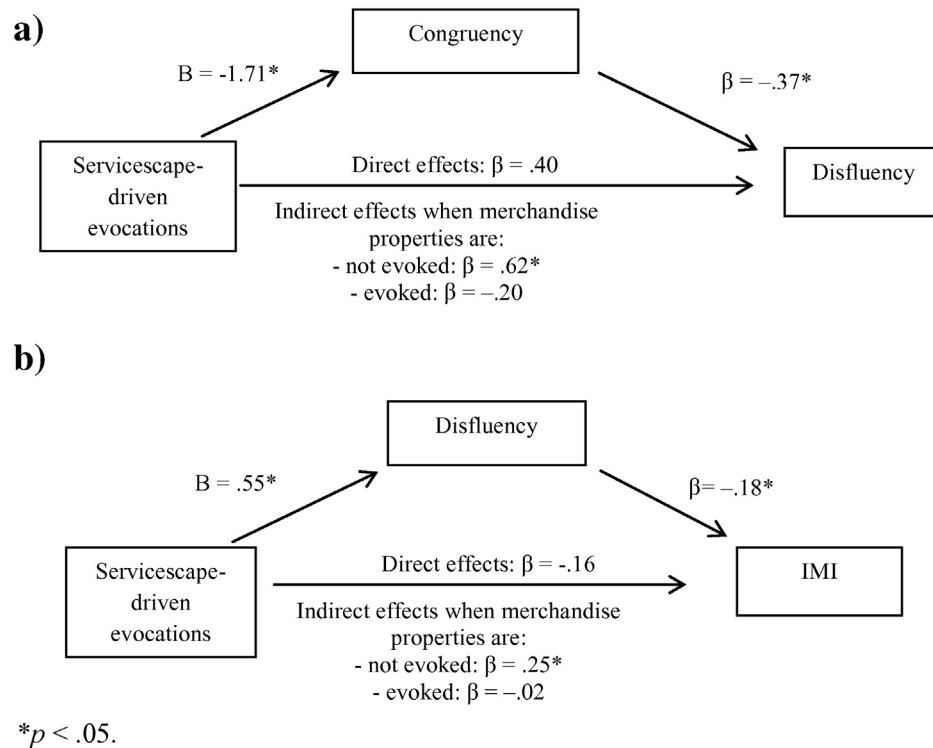

Fig. 1. Theoretical model.

a)

b)

*p < .05.

Fig. 2. The moderated-mediating influence of servicescape-driven evocations. a. Congruency as a mediator of the servicescape-driven evocations – disfluency relationship. b. Disfluency as a mediator of the servicescape-driven evocations – IMI relationship. *p < 0.05.

Finally, this study also extends the knowledge on the effects of incongruency on consumers' cognitive responses (e.g. Lunardo & Mbengue, 2013). For instance, Mitchell et al. (1995) demonstrated that, when an ambient scent conforms to the actual properties of the product (e.g., a chocolate scent in a chocolate store), congruency positively impacts consumers' cognitive responses. Accordingly, the current research extends this contribution by introducing two novel types of cognitions – disfluency and IMI – that are affected depending on levels of incongruency in the servicescape. More specifically, the mediating role of 1/ disfluency in the relationship between evocations and IMI, and 2/ IMI in the relationship between disfluency and shopping intentions, sheds some new light on the process whereby consumers may "find it mentally challenging and stressful to integrate resources to obtain the value they desire" (Ostrom et al., 2015, p. 139).

4.2. Managerial implications

This research also provides three major implications for both service providers and retailers.

First, although the experiment involved a restaurant, the findings may be useful in other contexts. As Morrin and Chebat (2005) highlight, various types of servicescapes (e.g., restaurants, repair shops, clinics) can affect customers' perceptions and behaviors. As a consequence, the results of this study may apply to service providers other than restaurant owners.

Second, since the environment is the first aspect that is apprehended by consumers, the servicescape is expected to be the main attribute used to form their perceptions regarding the service provided (Hooper, Coughlan, & Mullen, 2013). Hence, retailers that are tempted to use servicescapes evoking high-end properties while providing low-value merchandise may create incongruency, which drives consumers to expect attributes that are not actually met (Bitner, 1990; Mattila & Wirtz, 2006; Wirtz & Bateson, 1999). In turn, and due to IMI, this decision may result in negative effects when consumers come

into contact with the actual merchandise. A concrete example of such an effect of servicescape-driven evocations on IMI may help to anchor this point. Consider the recent launch by the Bristish retailer Tesco of its new range of meat and fresh produce using a series of fictional farm names, such as Boswell Farms' beef steaks and Woodside Farms' sausages. These names appeared on posters displayed in their selling points, thus misleading consumers about the provenance of produce. While such names evoked the freshness and naturalness of products that come from existing British farms, the news revealed that they were fictional and that the produce was often sourced from abroad (Levitt, 2016). As such, the current research helps understand this specific case by underlying that such practices may lead consumers to develop IMI resulting from an incongruency between the properties evoked (here by the British-sounding farm names) and those of the merchandise.

In short, service providers should design and implement congruent environments that match the servicescapes to which consumers are exposed in reality. This contribution also applies to companies operating in low-cost market segments, e.g., retailers selling merchandise in discount/medium price. As in the Tesco case, a misleading environmental design may be quite detrimental. Consequently, other retailers such as Wal-Mart or Target should provide their merchandise in environments that do not evoke any suspicion regarding their quality or prestige. Rather, some lack of sophistication in their servicescapes may connote some honesty regarding the quality of their merchandise, which may result in more positive responses (Lunardo & Mbengue, 2013). This recommendation is particularly relevant for retailers and service providers that sell experience goods (i.e., products or services whose properties can be ascertained only during or after consumption). For retailers whose products or services have properties that can be easily observed and appraised, the evocations driven by the servicescapes might not influence consumers' IMI and shopping intentions as much. However, further research is needed to address this question more thoroughly.

4.3. Implications for further research

The present work thus raises several questions for future research. A first limitation pertains to the context. Since the study has been conducted in France, one may wonder whether the results are specific to this cultural setting and/or applicable to other countries. To this regard, and as evidenced by the FE No 367, a Flash Eurobarometer survey (European Commission, 2013), French consumers appear among the most skeptical individuals about many topics related to green products (though they do not dramatically differ from people from other western countries like Netherlands and Germany). More comparative and/or cross-cultural research could examine whether these results could be generalized and replicated in other cultural contexts.

Second, while this research highlights the negative impact of incongruency, further work should explore whether some consumers might somewhat appreciate a lack of congruency between a servicescape evoking some valued properties (e.g., prestige, luxury) and lower-value merchandise. Considering the success of retailers that provide nice environments but offer products that are not of premium quality (e.g., H&M), future studies could focus on this issue and investigate the conditions under which incongruency may not result in IMI and less favorable shopping intentions. For instance, hedonic shoppers (Babin, Darden, & Griffin, 1994) might enjoy pleasurable servicescapes, even if perceived as manipulative.

Finally, research is needed to explore some potential moderators that may account for individual differences in the effects of incongruent stimuli on IMI. Previous studies have reveal that regulatory focus is an antecedent of persuasion knowledge activation (Kirmani & Zhu, 2007), thus suggesting that prevention-focused consumers are more likely to activate persuasion knowledge, and therefore to develop IMI. As such, regulatory focus may be an appealing moderating variable to be considered in future research on this topic.

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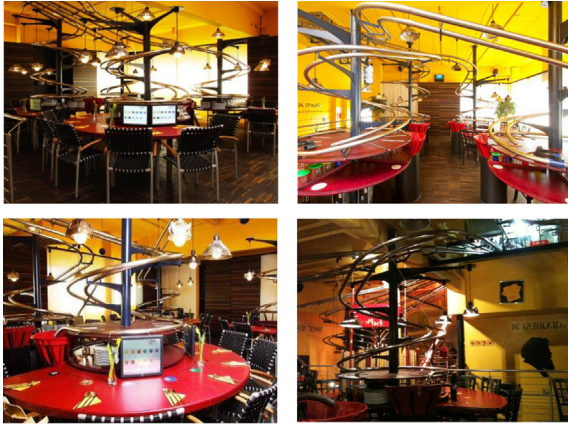
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Appendix A. Stimuli for different evoking-servicescape conditions

Conditions	Stimuli
A non-organic food servicescape condition	
An organic food servicescape condition	

Appendix B. Stimuli for different product properties conditions

Conditions	Stimuli
A non-organic food menu	
An organic food menu	

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