Quality Incongruency in Servicescapes as a Driver of Inferences of Manipulative Intent

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Abstract

This study investigates the effect of incongruency in the servicescape on inferences and subsequent behavior. Specifically, the focus is on identifying the influence that incongruency between the servicescape quality and the merchandise quality has on inferences of manipulative intent. From a preliminary qualitative study, it is proposed that when there is a mismatch between a high quality servicescape and a low quality merchandise, consumers infer that the servicescape is used as a manipulative tool purposely designed to control patronage behavior, such inferences resulting in less approach behavior. A confirmatory experiment confirms this prediction. Results confirm the effect of quality incongruency on inferences of manipulative intent, and show that inferences of manipulative intent mediate the effect of perceived incongruency on approach behavior. The implications of the research are discussed, as are the limitations.

Keywords: Servicescape, Incongruency, Inferences of Manipulative Intent, Cognitive Elaboration

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Referring to the “built environment” or, more specifically, the “man-made, physical surroundings as opposed to the natural or social environment” (Bitner 1992), the servicescape – including spatial layout and elements related to aesthetic appeal – helps service providers produce positive emotional effects, such as pleasure and arousal that enhance the consumers’ shopping behavior (Baker et al. 1992; Donovan and Rossiter 1982; Donovan et al. 1994; Kaltcheva and Weitz 2006; Sherman, Mathur, and Smith 1997). Servicescapes have been shown to be perceived holistically (Mattila and Wirtz 2001), consumer evaluating the store environment not only on the basis of discrete influences of atmospherics, but rather on the basis of the congruency between them. As a consequence, the congruency – or the degree of match between the components of the environments (Spangenberg, Crowley and Henderson 1996) – is of primary importance for the positive impact of the servicescapes (Mattila and Wirtz 2001, 2006).

In this context, incongruency has been showed to induce more negative responses than congruency (e.g., Mattila and Wirtz 2001; Spangenberg, Crowley and Henderson 1996; Spangenberg, Grohmann and Sprott 2005). However, the underlying mechanism through which such negative effects occur has remained underinvestigated. In other words, it remains to be determined why incongruency has negative effects on consumer responses. Another gap in the literature lies in the widely adopted assumption that servicescapes effects are unconscious. The servicescape is under the control of the retailer, or more broadly the service provider, and thus purposely designed to reach outcomes that are beneficial to the service provider (Kotler, 1973; Turley and Milliman, 2002). Yet, the effects of servicescapes on cognitions and emotions are considered by previous research as an unconscious process (e.g., Sherman, Mathur and Smith 1997; Spangenberg, Crowley and Henderson 1996) and consumers as passive actors that do not try to find reasons for the design of such servicescapes. It is here posited that this implicit assumption may be challenged. Individuals are indeed not passive information processors but rather active and interpretive agents who develop theories and beliefs about persuasion tactics (Friestad and Wright 1994; Kirmani and Campbell 2004).

Aiming to fill these two gaps, this article posits that servicescapes may under specific circumstances of quality incongruency lead consumers to consciously decode the servicescape as a manipulative tool, such a process explaining the underlying mechanism of the negative effect of incongruency on customer behavior. Quality incongruency, as in previous research (Morrin and Ratneshwar 2003), is here referred to as the mismatch between servicescapes and the merchandise. It is suggested in this article that when the servicescape is of high quality and the in-store offer quality or the service is of low quality, consumers develop inferences that the retailer or the service provider is attempting to persuade them by the use of incongruent, unfair, or manipulative means, here a pleasant servicescape (Campbell 1995). Relying on the S-O-R model (Mehrabian and Russell 1974; Donovan and Rossiter 1982) where stimuli (S) from the environment stimulate perceptual individual’s responses (O) which in turn affect their behavior (R), it is here suggested that under the condition of incongruency between the quality of the servicescape and the quality of the merchandise, such inferences of inferences of manipulative intent will occur and mediate the effect of servicescapes on behavior.

In this context, the aims of this article are thus twofold. First, this articles aims to explore whether inferences of manipulative intent can be induced by incongruent quality cues in the servicescape. Second, this research aims to test and confirm the effect of quality incongruency in servicescapes on inferences of manipulative intent.
and on subsequent behavior. Considering these goals, the article is organized as follows. We first rely on the academic literature on servicescapes and congruency and then on a preliminary qualitative study to propose a model where the congruency between servicescapes quality and the in-store offer quality interact to affect inferences of manipulative intent. More specifically, we hypothesize that when in-store offer quality is low, servicescapes of high quality will induce inferences of manipulative intent, which are then hypothesized to exert a mediating negative impact on consumer's approach behavior. A confirmatory experiment is then conducted to test the model. Our results confirm the model and offer several contributions for retailers and more generally for service providers. Our research shows that retailers may not gain in providing a service environment of high quality when the quality of their merchandise can be considered low. In such a case, consumers may infer that the environment has been designed with a manipulative intent aimed to hide the actual low quality of the in-store offer, such inferences leading to less favorable behaviors toward the retailers and service providers.

**EFFECTS OF (IN)CONGRUENCY IN SERVICESCAPES**

The "servicescape" refers to the design of the physical environment that characterizes the context which houses the service encounter (Bitner 1992). For the last thirty years, a growing body of research has emphasized the effects of pleasant servicescapes on shoppers' attitudinal and behavioral responses (see Turley and Milliman 2000 for a review). These effects occur after consumers holistically perceive and assess all the discrete stimuli present in the environment. Since the servicescape derives from a “total configuration of environmental dimensions” (Bitner 1992, p. 67), consumers appraise the degree of fit, or the congruency, between the different components of the environment. In other words, it is not discrete stimuli of the environment – such as furniture, light, music or scent – that individually exert effects on approach / avoidance behavior but rather the holistic perception that consumers have of the degree of fit in the environment.

The positive effects of such congruency – as well as the more negative impacts of incongruency – have widely been acknowledged in the literature. Three different types of congruency that have been investigated can be distinguished in the literature, all of them being shown to exert a positive impact on consumers' responses. First, previous research has studied the effects of congruency between different stimuli of the environment. In a study dealing with the congruency between scent and music, Mattila and Wirtz (2001) found that when the arousal levels of scent and music match, such a congruency exerts a positive impact on consumer's reactions, with pleasure, satisfaction and impulse purchases being higher than in the incongruency condition. In another study, Spangenberg, Grohmann and Sprott (2005) found that the addition of the ambient Christmas scent led to more favorable evaluations when Christmas music was being played, and had no effect or led to less favorable evaluations when non-Christmas music was being played, thus highlighting the respective positive and negative effects of congruency and incongruency.

The second type of congruency that has received attention concerns the fit between stimuli from the environment and consumer's characteristics. For instance, Mattila and Wirtz (2006) have investigated the congruency between the actual arousal level in the service environment and the arousal level that consumers expected. Their results show that the presence of a high arousal congruency – when consumers expect a highly arousing environment that they actually experience – enhances the amount of pleasure and satisfaction compared to a condition of
incongruity where the levels of expected and experienced arousal did not match. Another consumer's trait of interest that has received attention is shopping style. Morrin and Chebat (2005) compared the effects of servicescapes for two distinct types of consumers, namely impulsive consumers and contemplative consumers. They found that, compared to a condition of incongruency, a congruent condition where ambient cues (such as music and scent) are congruent with individuals' affectively or cognitively oriented shopping styles is more effective at enhancing consumer's responses. Specifically, impulsive shoppers (who made unplanned purchases) are positively affected by the presence of background music, whereas contemplative shoppers (who did not make any unplanned purchases) are positively affected by the presence of a pleasant ambient scent.

The third type of congruency – which has received the most attention from academics (Areni and Kim 1993; Mitchell, Kahn and Knasko 1995; North, Hargreaves and McKendrick 1999; Spangenberg, Crowdley and Henderson 1996; Spangenberg, Sprott, Grohmann and Tracy 2006) – refers to the degree of fit between stimuli and merchandise. For instance, Mitchell, Kahn and Knasko (1995) find that ambient olfactory cues (i.e., chocolate or floral scents) influence consumers' information processing and choice behavior regarding products either related or unrelated to the scents (i.e., candy assortments or floral arrangements), such that congruent scents – compared to incongruent scents – enhance consumer judgments and choice behavior. Positive effects of congruency have also been found in a study investigating the effects of the perceived gender of an ambient scent and a store's gender-based products (Spangenberg, Sprott, Grohmann and Tracy 2006). Results show that consumers evaluate the servicescape and the merchandise more favorably, and are more likely to exhibit approach behaviors in the presence of an ambient scent congruent with gender-based products in comparison to an incongruent scent. Such positive effects of congruency – and negative effects of incongruency – between ambient stimuli and merchandise have also been found with regard to music. For example, North, Hargreaves and McKendrick (1999) demonstrated that French wines sold better when paired with congruent (i.e., French) music than with incongruent (i.e., German) music.

While the previous research discussed above emphasizes the negative influence of a lack of congruency, the explanation for such an effect remains understudied. This is toward that explanation that this article now turns.

INCONGRUENCY AND COGNITIVE ELABORATION

As discussed above, congruency in the servicescape is an important factor that positively affects consumers’ responses. As highlighted above, retailing and service research have stressed the positive consequences of congruency between ambient cues and other variables important to marketers. For instance, regarding the specific effect of scents, it is now know that ambient scents that are congruent with a product class can be a powerful tool that retailers can use to influence consumers' perceptions and decisions (Mitchell et al. 1995). Similarly, with regard to music, retailers and services providers can diffuse music that is congruent with a specific product to affect purchase behavior of that product (North et al. 1999).

The positive effects of congruency find an explanation in Mandler's (1982) theory of congruity. Mandler posits that congruity – or congruency – leads to favorable responses because, other things being equal, individuals prefer objects that conform to their expectations and require low levels of cognitive elaboration. Following this view, congruent servicescapes may result in positive responses because they
provide individuals with environment that require only a low level of cognitive elaboration. On the contrary, and of main interest for the present research, incongruency has been shown to trigger cognitive elaboration: incongruent information prompts attention and provokes elaboration (Heckler and Childers 1992). To this regard, empirical evidence supports the fact that the increased elaboration associated with incongruency has a negative effect on evaluations (Meyers-Levy and Tybout 1989). As a consequence, since incongruency may increase attention to the servicescape, it may also prompt consumers to think about the reason for the presence of stimuli in the servicescapes. As shown in previous literature on incongruency (Russell 2002), this thinking will result in corrective mechanisms if the marketing stimulus in the servicescape is perceived as inappropriate. Therefore, while congruent servicescapes are found to lead to positive responses, incongruent servicescapes may be likely to raise consumers' suspicion, which leads to negative responses (Friestad and Wright 1994).

Although this process could explain the negative effects of incongruency, research has so far neglected the potential underlying mechanisms explaining the effects of incongruency (e.g., North, Hargreaves, and McKendrick 1999; Spangenberg, Sprott, Grohmann and Tracy 2006). Only one study to date has provided explanation for the negative effects of incongruency in the servicescape (Bosmans 2006). Results support the process described above: when stimuli from the servicescape are congruent with the merchandise, they positively affect consumers' evaluations, while incongruent stimuli are corrected for when their influence becomes salient or when consumers are sufficiently motivated. In other words, incongruency has negative effects because it prompts cognitive elaboration, thus making the stimuli more salient, which leads consumers to engage in a conscious process whereby they correct for their influence. However, what research has not identified is the mechanism explaining why consumers correct for the influence of incongruent stimuli.

Considering the importance of – but also the lack of literature about – this issue, the next section presents a qualitative preliminary study that aims to explore the potential effects of incongruent servicescapes on consumers’ cognitive responses.

**PRELIMINARY QUALITATIVE STUDY: HOW SERVICESCapes DRIVE COGNITIVE RESPONSES**

**Method**

Given limited previous research on the potential influence of incongruent servicescapes on consumer's cognitive elaboration and subsequent responses, this preliminary study adopted a qualitative approach to identify and explore the factors related to incongruency that influence such cognitive processes and attitudinal responses.. Tape-recorded in-depth interviews were thus used to investigate how cues from the environment can impact these cognitions and attitudes during shopping and service experiences. The informants were recruited in two cities as to ensure contrast in terms of age, gender, socioeconomic status and shopping experiences. The sample size was determined by the principle of saturation (Patton 2002). Data collection ceased after 22 interviews once new patterns and themes were no longer apparent in the data. The resulting sample was comprised of a diverse group of participants in terms of age and education levels (13 women, 9 men, with ages ranging from 25 to 61, three retired and two unemployed participants, 8 living in the countryside).
Before starting the interviews, the researchers ensured participants that their identity would remain confidential. In order to minimize any risk of interviewer-induced bias, the topic and research question, i.e. “whether and how servicescapes might lead consumers to raise suspicion about the goal behind the design of the environment” were never introduced. Thus each interview started with “grand tour” questions such as “their personal interest in shopping”, “lived experiences in stores”, “general perceptions of store environments” and “representations of an ideal point of sale”. Informants were encouraged to recall experiences pertaining to ordinary local shopping trips or less frequent experiences in themed stores, off-center shopping malls or retail parks. Following the principles of in-depth qualitative and exploratory research, the informants were free to guide the flow and content of the discussion. Interestingly, they spontaneously recalled episodes of what they had noticed in stores and service environments, regularly focusing on disturbing perceptions from ambient stimuli. The researchers did not ask predetermined questions unless the dialogue broke off. Although such retrospective accounts are likely to create potential sources of bias in subjects’ responses, they also are valuable to “more adequately capture the actual overall effects due to a target’s persuasion knowledge than measures taken immediately after message delivery is completed” (Friestad and Wright 1994, p. 11). Thus, though the accuracy and the exhaustiveness of the episodes recounted by the informants cannot be assessed, especially regarding recounted behavior, the salient features of their recollections were both interesting and significant.

Lasting about an hour on average, the interviews finally accounted for more than 20 hours of conversation and produced 71 pages of single-spaced transcribed text. Each interview was analyzed ideographically. Data analysis and coding of the underlying themes were produced separately, the coders agreeing on 86 percent of their categorizations. All disagreements were settled by discussion. Nine retail sectors, including fifty-one store brands, were finally mentioned, mostly (43 out 51) among specialty stores – clothing, footwear, cosmetics, furniture, interior decoration, DIY, gardening and food. Also, five types of service providers (beauty salon, travel agency, garages, hotels and restaurants) were mentioned during the interviews.

Findings

Both positive and negative shopping and service encounter experiences were of interest in the study; however, what is striking is that in the majority of cases the most salient experiences were spontaneously those that were considered by the interviewees to be negative in some respect. As a result, much of the data collected related to unpleasant retail and service encounters. This outcome is in line with research showing that negative experiences are more memorable than positive experiences (Weiner 2000). However, the fact that most of the interviewees placed greater emphasis on the negative aspects of the servicescapes contrasts with the dominant view where servicescapes have mainly positive effects (Turley and Milliman 2000). Also of interest is that when the valence of the experience in the retail or the service encounter is described as negative, this effect seems to be related to the lack of congruency, while congruency seems to drive positive outcomes. As negative experiences are likely to reduce the likelihood of approach behavior, the findings are of considerable managerial relevance for retailers and service providers. Thus, positive effects of congruency are first exemplified, and negative narratives about incongruency are then presented. Finally, a conceptual model is suggested.
Positive Effects of Congruency

Consistent with the retailing and service literatures, most of the interviewees exhibited at least once positive discourses toward congruent servicescapes. Such servicescapes appear as an important and enjoyable aspect of the shopping trip. As Julie exemplifies, servicescapes can be a source of pleasure if they are for instance congruent with the season. During Christmas, a congruent servicescape connoting the joyful spirit of Christmas is depicted as a pleasant environment, consistently with the results of Spangenberg, Grohmann and Sprott (2005) who found that congruent ambient stimuli associated with Christmas lead to higher evaluations.

For me, atmosphere is the important thing. I think it must follow the passage of time and influence us, or at least put us in a state of mind, in the spirit of Christmas for example, to make us feel something in relation to the moment… They have certainly understood that people have a more favorable attitude when they are relaxed... (Julie, F, 25).

Further pleasure in congruent servicescapes appears to derive from the personality that such congruent environments give to the store. Congruent stimuli create a coherent holistic environment that can signal a certain personality, what one informant – Roman – called the "spirit" of the store. Servicescapes thus appear as an efficient communicating tool about the positioning of the store, leading respondents to express positive thoughts about such servicescapes that send a clear signal whether consumers are part of the target or not.

There are shops where the music is a little less loud, where the lighting is a little more subdued; some others where specific odors are used, and that's part of the spirit of the store (Roman, M, 29).

However, an interesting result, somehow contradictory with the wide body of literature positing that congruency has only positive effects (e.g., Mattila and Wirtz 2001, 2006), lies in the negative effect that a perfect congruency between the different components of the servicescape may have on inferences. Two informants spontaneously reported that when the stimuli in the servicescapes seemed to match perfectly, they exhibit skepticism toward such a coherent environment. Two types of congruency are here illustrated: one between the ambient stimuli, and another one dealing with the fit between the environment and consumer's profile. When high, such types of congruency are depicted by our interviewees as parameters that retailers could precisely manipulate to optimize the consumers' perception and patronage behavior, as exemplified here:

Everything they do in the store, beyond the sellers, that is to say the music that goes with the atmosphere, the smell put on each garment, the use of soft light so that you don't know at the end if the shirt you bought has the color that you saw in the store… I wonder if it cannot play unconsciously on people, you know, put them in a state such that they are more willing to buy. (Claude, M, 31)

For instance, at 7 PM, people in their thirties listen to music from the eighties on their way home from work. I don't know if they do it on purpose, but every time I go there between 7 and 8 PM, it's the same type of music…. In clothing stores, how they use music is unbearable, cause according to what they sell, they use the music that fits the best: if it's a leather jacket, they diffuse hard rock. (Nicolas, M, 31)

Incongruency and Inferences of Manipulative Intent
Interviewees’ accounts of their shopping and service experiences evaluations appeared to be influenced not only by congruency between the cues of the environment but also by incongruency. When incongruent, these cues are depicted to produce a manipulative environment that has been purposely designed to alter their perceptions of the in-store offer quality. Consistent with Bosmans (2006, p. 34) who suggests that incongruency in servicescapes is likely to “alert people to their potentially biasing influence”, informants report discrepancies between expected “natural” settings and “artificial,” “fake,” or “disguised” atmospheres as deliberately produced by the retailer or the service provider to induce purchasing behavior.

Obviously in a perfume store there’s a good smell, at Nature & Découvertes, there’s a fruity scent. I guess it’s kind of logical to do this kind of thing, but at the same time, I can’t figure out the connection at Galeries Lafayette. Why it smells of strawberries near the escalator. And again, even, why does Abercrombie have such a perfume smell when they actually sell clothes?! Even if they do sell perfume, it’s not their main line, so I don’t get it. L’Occitane, it’s the same. You really feel they want to rip us off. It smells too strong. It bothers me because it’s really just taking people in and treating them like consumers. They only want one thing: to make us buy. Because the smell it not natural, it is anything but natural, though they claim it is. It’s really ... It’s like Abercrombie, it’s much too strong. They go too far, which means that I don’t want to go in because it smells so strong....I could almost say that a salesperson doesn’t even need to come and see us. It’s like the smell is so strong that we just have to buy. (Flore, F, 25)

You might be influenced by the atmosphere that makes you buy the product. It may deceive you in your assessment of the intrinsic quality of the product…You can really go wrong on stores like Nature & Découvertes, yes, where you buy the candle with the scent, and when you light it, it’s not that at all. (Mathieu, M, 29)

This extract depicts the incongruency between references pertaining to the characteristics of the offering – here the natural origin of the Provencal product – and the quality of the environment. In this extract, such quality incongruency appears as a cue consumers rely on to appraise the retailer's motives. Still consistent with Bosmans (2006) who found that incongruent atmospherics lead consumers to correct for their influence, this extract shows that informants have come to construe this perceived incongruency as an influence tactic. Some informants have experienced incongruency as a “change of meaning principle” (Friestad and Wright 1994), that is a cue that now operates as a cognitive background for their inferences of manipulative intent and a frame that orients their subsequent evaluations. When the environment is of high quality, which may signal that the in-store offer or the service is also of high quality, a perceived incongruency between these two qualities thus creates a frame that orients subsequent evaluations.

An interesting result lies in the manipulative intent that respondents attribute to retailers or service providers that designed such sophisticated environments while the quality of the merchandise is actually low. Consistent with Firat and Venkatesh (1995) who proposed that consumers react negatively to marketers that dictate meanings and drive consumption experiences, it appears that the manipulative intent that respondents attribute to retailers and service providers is driven by the perception that such environments are deliberately implemented to exert a control on consumers. This control is exerted through the influence that retailers exert on consumer's perception of in-store quality. Environments of high quality are depicted
by respondents as tools implemented to "fool" them about the real quality of the product or the service. Informants’ reactions illustrate their beliefs that such incongruent servicescapes are designed in a manipulative way:

One might say that the retailer is nice, he tries to make the store more pleasant ... It is really callow to think like that. In fact, he's just trying to get money. (Nicolas, M, 30)

There [in Abercrombie stores], you really see it is done on purpose. It ruins everything. In fact, even if it smells good, though too much anyway, you think they really think you're an idiot. (Claude, F, 31)

As a consequence, informants declare being more likely to quit, thus compromising future relationships with and profitable outcomes for retailers and service providers:

Yet I loved, I liked this side of Provence here [in l'Occitane]. We seek the regional accent, the authenticity... but that is when I realized they were not selling natural products at all that ... I no longer patronized this retailer. (Emmanuelle, F, 39)

Afterwards, you’re not necessarily attracted by this sort of thing. You think it’s a rip-off, that’s the impression you get, and you don’t go in. When it’s too obvious, when it looks fake, that turns me off. I don’t go back any more. (Laurence, F, 46)

Discussion and theoretical implications for a conceptual model

The narrative emphasize that incongruency prompts consumers to develop inferences about the retailers' motives for the use of sophisticated environments. A striking result is that the most cited type of incongruency refers to the mismatch between the quality of the servicescape and the quality of the merchandise, what is next referred to as "quality incongruency". Consistently with congruency literature which posits that incongruency (compared to congruency) leads people to engage in higher levels of cognitive elaboration (Mandler 1982), it appears that when a mismatch between the quality of the servicescape and the quality of the merchandise occurs, quality incongruency appears to induce negative inferences, such that consumers attribute to the environment a corporate goal aiming at prompting them to adopt a purchasing behavior that is favorable to the retailer. Our qualitative preliminary study suggests that these inferences can refer to inferences of manipulative intent that can be defined as inferences that the service provider is attempting to persuade consumers by incongruent means (Campbell 1995). More precisely, when a gap is perceived between a high quality servicescape and a low quality merchandise, consumers infer that the servicescape is used as a manipulative tool designed to control their patronage behavior. This view is in line with the conceptualization of servicescapes, which are conceptualized as a cue that consumers use to infer about the firm's capabilities and quality and that may communicate the firm's image and purpose to its customers (Bitner 1992).

The narratives of the preliminary study highlight that consumers use quality incongruency as a cue to draw inferences about retailer's motives. These narratives, as well as the previous literature on servicescapes and congruency discussed above, suggest a model (depicted in Figure 1) of the effects of incongruency between servicescapes quality and in-store offer quality on consumer's inferences of manipulative intent and approach behavior. This model and its components lead to the hypotheses below.
**Hypothesis 1:** Servicescapes quality interacts with in-store offer quality to affect IMI. Specifically, when in-store offer quality is low, IMI are expected to be higher when servicescapes quality is high (versus low). When in-store offer quality is high, no effect of servicescapes on IMI is expected.

**Hypothesis 2:** Perceived incongruency between the quality of the servicescape and the quality of the merchandise mediates the interacting effect of servicescapes quality and in-store offer quality on IMI.

**Hypothesis 3:** IMI mediates the effects of perceived incongruency on approach behavior.

![FIGURE 1 - Conceptual Model of the Impact of Incongruency between Servicescapes Quality and In-Store Offer Quality](image)

A confirmatory study is now designed to test these hypotheses.

**CONFIRMATORY STUDY: TESTING HYPOTHESIS**

This confirmatory study is designed to test the conceptual model depicted in Figure 1 and to investigate how quality incongruency impact consumer’s inferences of manipulative intent and subsequent behavior. It is expected that when facing a mismatch between the quality conditions of servicescapes and in-store offer, such that the quality of the in-store offer is low and the servicescapes quality is high, incongruency lead consumers to develop inferences of manipulative intent that result in less favorable behavior.

**Method**

**Procedure**

A 2 (servicescapes quality: low versus high) × 2 (in-store offer quality: low versus high) between-subjects experiment was employed to test the hypotheses. Respondents were 121 individuals who volunteered to participate to this study, 53% of them being women and 85% being between 18 and 40 years old ($M = 28.30$, S.D. = 10.8).

Participants were randomly assigned to one of the four experimental conditions. In order to ensure that the respondents were comparable among experimental conditions, respondents were matched in terms of gender, age, and job position. Chi-square tests are reassuring and indicate no significant differences among gender ($\chi^2 = 4.22$, $p > .20$), age ($\chi^2 = 4.02$, $p > .60$) and position ($\chi^2 = 4.23$, $p > .60$) between the different cells of the experimental design.

The research design involved video simulations and scenario-based descriptions. After having watched a picture that describes a servicescapes of low or
Manipulation of servicescapes quality and in-store offer quality

Manipulation of servicescapes and pretest. The retailing literature usually defines servicescapes quality as resulting from the quality of atmospherics (e.g., Spangenberg, Crowley and Henderson 1996). Design, color, ambient music and scents are cues that help consumers to appraise the quality of the store environment (Baker et al. 1992). Thus, manipulation of servicescapes quality involved varying visual elements such as floor, design and furniture. The low and high conditions of servicescapes quality were manipulated through the exposure of participants to a one-page printed picture of a store environment of low or high quality, this procedure having received support from many academics (Kaltcheva and Weitz 2006; Kirmani and Zhu 2007; Koelemeijer and Oppewal 1999).

The retail setting which has been chosen for the experiment was a flower shop. Flower shops are often heterogeneous and unfamiliarly branded, and thus provide the researchers with a wide diversity of store environments, allowing the realistic manipulations of high and low levels of servicescapes quality. Further, compared to other settings where products are homogeneous, flowers shops can provide a wide variance in terms of in-store offer quality and thus allow a realistic manipulation of that variable (Belonax and Javalgi 1989).

In order to accurately manipulate the low and high levels of servicescapes quality, a pretest was conducted. Based on the characteristics of prestige-image and discount-image servicescapes proposed by Baker et al. (1994) that specify what visual elements could lead to changes in the perception of the servicescapes quality, the researchers collected on the Internet five pictures of flower shops. They took care of selecting pictures that differ only in terms of servicescapes quality. All the pictures were similar in terms of color (all in color), size, resolution, human presence and product density. After having selected the five pictures that were considered differing only in terms of servicescapes quality, the researchers asked 113 undergraduate students to rate the servicescapes quality of one of the five stores. This resulted in a 5 × 1 between-subjects design. The seven-item measure of quality was taken from Mattila and Wirtz (2001) and exhibited reliability (α = .92). Results of the ANOVA revealed significant differences (F (4, 112) = 9.29, p < .000), with stores coded 2 and 4 being rated as respectively providing the servicescapes of lowest quality (M = 3.14) and highest quality (M = 4.47). A t-test for independent samples revealed that the mean difference between these two servicescapes was significant (t111, = -4.11, p <.000). Pictures of the store environments coded 2 and 4 were thus selected for manipulating respectively the servicescapes of low and high quality. The low servicescapes quality condition consisted of being exposed during 30 seconds to the picture of the servicescapes numbered 2, while the high- servicescapes quality condition consisted of being exposed the same amount of time to the picture of the servicescapes numbered 4.

Manipulation of in-store offer quality. Regarding the in-store offer, the low versus high quality conditions were manipulated through scenarios. Being used by many academics (e.g., Cowley and Mitchell 2003; Kaltcheva and Weitz 2006), the scenario method provides the researcher with four methodological advantages. Scenarios inject variance into the independent variables. By providing a standardized setting for all respondents, they also enhance internal validity (Havlena and Hoolbrook 1986;
Further, the scenario method has ecological validity in the context of quite complex cognitive processes and affect, involving inferences of manipulative intent (Bateson and Hui 1992). Finally, previous research suggests that consumers can create realistic, visual images from verbal stimuli (MacInnis and Price 1987).

In order to manipulate in-store offer quality, researchers gathered information about what could be considered as flowers of low and high quality. The flowers quality manipulation thus involved varying four elements of the flowers, visual and olfactory (Gudin 1995): (1) color purity, (2) stage of the budding process, (3) perceived degree of resistance of the petals, and (4) freshness of their perfume. Manipulating these three elements, two scenarios describing a walk through a flower shop were designed to realistically present information about the perceived quality of the flower provided in the stores. Participants were thus randomly assigned to read one of them:

As you’re taking a walk, you run into a flower shop, which is represented below (after this sentence, participants watched one of the two pictures describing the quality of the store environment for 30 seconds). You’re telling yourself that you would definitely buy a little flower bouquet for your home. Having some flowers displayed in the main room at home, it could be nice. To make you your own judgment of the quality of the flowers you could buy in that shop, you decide to go into and to have a glance at the various flowers.

**High perceived in-store offer quality treatment:** The first bouquet which you notice is composed of various flowers. Colors are attractive, petals start to open, that bouquet will probably last two weeks. The second bouquet on which you pay your attention consists of roses of a very pure red color. Next to this bouquet, another one consisting of the same flowers seems perfect, flowers being in the course of opening. You’re taking a quick look at a last bouquet. Flowers seem really fresh, their petals look firm and resistant, and spread a powerful and pleasant perfume.

**Low perceived in-store offer quality treatment:** The first bouquet which you notice consists of various flowers. The colors of the flowers are quite drab, the bouquet will probably last less than a week. The second bouquet on which you pay your attention consists of red roses. Again, flowers seem already dead. Next to this bouquet, another one consisting of the same flowers seems a little bit young, petals being closed and not likely to be opening soon. You look at a last bouquet. Flowers don’t seem fresh, their petals look lip, and they smell not as good as you expect them to do.

**Measures**

Approach behavior, referring to the positive responses toward the environment or items within the environment, such as intentions to remain in, or revisit a store, or actually spending money in a store (as opposed to avoidance behaviors which reflect opposite responses, such as a desire to leave a store, no intention to revisit, or failure to spend money) was assessed with five items from Kaltcheva and Weitz (2006; $\alpha = .89$). Inferences of manipulative intent were measured using the 4-item scale proposed by Lunardo and Mbengue (2013). Although originally developed by Campbell (1995) and Cotte et al. (2005) in the field of advertising, the scale from Lunardo and Mbengue (2013) has been chosen given its relevance for the retail setting ($\alpha = .88$). These items were placed at the end of the questionnaire to avoid
any response bias. The seven-item measure of quality from Mattila and Wirtz (2001) was used for the perceived quality of the environment manipulation check (α = .94). The scale used for the perceived in-store offer quality manipulation check was taken from Spangenberg et al. (1996) (α = .96). Perceived congruency was measured using a three-item scale (α = .84) adapted from Heckler and Childers (1992). Thus, the lower scores on the scales measured the higher levels of incongruency. Finally, for manipulation check purposes, the realism of the scenario was measured, using a single item measure (Liao, 2007). Seven-point scale items are used to measure each variable (Table 1).

<table>
<thead>
<tr>
<th>Construct Measure</th>
<th>Factor Loading</th>
<th>Average Variance Extracted</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Approach Behavior</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would enjoy shopping in this store.</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would avoid ever having to return to this store.</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(R) I would want to avoid looking around or exploring this environment. (R)</td>
<td>.89</td>
<td>.77</td>
<td>.89</td>
</tr>
<tr>
<td>I would be willing to buy things at this store.</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I would be willing to recommend this store to my friends.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inferences of Manipulative Intent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The way this atmosphere tries to persuade people seems acceptable to me. (R)</td>
<td>.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The retailer tried to manipulate the consumers in ways I do not like.</td>
<td>.87</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was annoyed by this atmosphere because the retailer seemed to be trying to inappropriately manage or control the consumers.</td>
<td>.83</td>
<td>.66</td>
<td>.88</td>
</tr>
<tr>
<td>The atmosphere was fair in what was shown. (R)</td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Servicescape Quality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unattractive / Attractive</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uninteresting / Interesting</td>
<td>.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad / Good</td>
<td>.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depressing / Cheerful</td>
<td>.85</td>
<td>.76</td>
<td>.94</td>
</tr>
<tr>
<td>Dull / Bright</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncomfortable / Comfortable</td>
<td>.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pleasant / Unpleasant</td>
<td>.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Merchandise Quality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Style: Outdated / Up to date</td>
<td>.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selection: Inadequate / Adequate</td>
<td>.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality: Low Quality / High Quality</td>
<td>.97</td>
<td>.92</td>
<td>.96</td>
</tr>
<tr>
<td>Prices: Low / High</td>
<td>.93</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perceived Congruency</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>For this store, the quality of the product suits well.</td>
<td>.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I’m not surprised to face such this level of merchandise quality on this store.</td>
<td>.92</td>
<td>.86</td>
<td>.84</td>
</tr>
</tbody>
</table>

Note: (R) means that the item has been reversed.

**TABLE 1 - Psychometric Properties of the Measures**

Discriminant validity was assessed following Fornell and Larcker (1981). The squared interfactor correlations between IMI and other variable were less than the
mean item communality of either factors, bringing support to discriminant validity of our measures. Convergent validity was also supported as the average variance extracted clearly exceeded 0.50 for all variables.

Results

Manipulation checks

Analyses of variance (ANOVA) were used to test the effectiveness of the two manipulations. Experimental manipulations appear effective. Participants in the high servicescapes quality treatment condition rated the servicescapes quality as significantly higher (\(M_{\text{High}} = 4.79\)) than the participants in the low servicescapes quality treatment condition (\(M_{\text{Low}} = 2.94\), \(F(1, 120) = 92.70, p < .001\)). Also, participants in the low in-store offer quality condition perceiving in-store offer quality as being lower (\(M_{\text{Low}} = 3.00\)) that in the high in-store offer quality condition (\(M_{\text{Low}} = 5.15\), \(F(1, 120) = 107.01, p < .001\)).

Further, results indicated that, overall, the scenarios were rated as realistic (\(\text{Median} = 4.86\), \(\text{SD} = 1.33\)), and that the ratings of realism between experimental conditions did not differ (\(F(1, 117) = 1.40, p > .10\)).

Hypotheses Testing

To test the interacting effect of servicescapes quality and in-store offer quality on inferences of manipulative intent, a two-way ANOVA was conducted. Although not hypothesized, results revealed main effects of both servicescapes quality (\(F(1, 119) = 5.42, p < .01\)) and in-store offer quality (\(F(1, 117) = 20.86, p < .001\)). More importantly, an interacting effect of servicescapes quality and in-store offer quality was found out (\(F(1, 119) = 3.73, p = .056\)) (Figure 2). To investigate this two-way interaction of servicescapes quality and in-store offer quality, we focused on the effect of servicescapes quality on inferences of manipulative intent in each in-store offer quality condition. In the high in-store offer quality condition, there was no effect of servicescapes quality, the mean difference between the low (\(M_{\text{Low}} = 2.89\)) and the high (\(M_{\text{High}} = 2.98\)) servicescapes conditions not being significant (\(F(1, 61) = .153, p > .60\)). However, in the low in-store offer quality condition, a main effect of servicescapes quality was found (\(F(1, 56) = 5.73, p < .05\)), with the mean of inferences of manipulative intent being significantly higher in the high servicescapes quality condition (\(M_{\text{High}} = 4.51\)) than in the low servicescapes quality condition (\(M_{\text{Low}} = 3.51\)). This result supports Hypothesis 1.
To test the hypothesis that perceived incongruency mediates the interacting effect of servicescapes quality and in-store offer quality on inferences of manipulative intent, we used the PROCESS macro with 5,000 bootstrap samples (model 7). This macro generates conditional indirect effects in moderated mediation models with a single or multiple mediators (Hayes 2012). Results show that when in-store offer quality is low, servicescapes quality exerts a negative indirect effect on inferences of manipulative intent through perceived congruency, the confidence interval of this indirect effect excluding 0 (-.97; -.03) (Zhao, Lynch and Chen 2010). However, when in-store offer quality is high, such an indirect effect does not occur, the confidence interval of the indirect effect including 0 (-.24; .14). This result supports H2 and shows that perceived incongruency mediates the effect of servicescapes quality only when in-store offer quality is low. More specifically, the negative valence of the indirect effect of congruency under the condition of low in-store quality shows that an increase in servicescapes quality decreases perceived congruency (increases perceived incongruency), leading to higher inferences of manipulative intent.

Turning to the mediating role of IMI in the effect of perceived incongruency on approach behavior, we examined this mediation using the PROCESS macro with 5000 bootstraps. Results revealed an indirect effect of congruency on approach behavior with a confidence interval excluding 0 (.04; .21), thus bringing support to the hypothesized mediating role of inferences of manipulative intent in the perceived congruency-approach behavior relationship. More specifically, the positive valence of the confidence interval reveals that perceived congruency (incongruency) negatively (positively) affects inferences of manipulative intent ($\beta = -.32; t = -3.92; p < .001$) which in turns decreases approach behavior ($\beta = -.34; t = -4.12; p < .001$), resulting in a positive (negative) indirect effect of perceived congruency (incongruency) on approach behavior.

Discussion
This confirmatory study shows that a lack of congruency between the quality of the servicescape and the quality of the in-store merchandise prompts consumers to develop inferences of manipulative intent. Of interest is that such a process occurs only under the condition of low quality in-store merchandise. In that case, the servicescape is decoded as an unfair and manipulative tool that might aim to enhance the perceived quality of the product, which explains that the effect of incongruency on inferences of manipulative intent does not occur under the condition of high quality merchandise. Also, the results show that inferences of manipulative intent play a mediating role between perceived (in)congruency and approach behavior. As a consequence, we explain the mechanism whereby incongruency leads to negative customers' responses. Specifically, when consumers identify a gap between a high-quality servicescape and a low-quality merchandise, quality incongruency is perceived and drives consumers to question the high-quality servicescape. This cognitive elaboration leads them to consider it as an attempt from the service provider to manipulate their behavior, such inferences resulting in less approach behavior.

GENERAL DISCUSSION
Theoretical Implications
The purpose of this research was to investigate the reasons explaining the negative impact of quality incongruency between the servicescapes and the merchandise (including the service). Across a preliminary qualitative study and a
confirmatory quantitative study, this article has respectively explored and demonstrated that when a high level of quality in the servicescape is combined with a low level of in-store offer or service, the perceived incongruency prompts people to develop inferences of manipulative intent, which result in a decrease in approach behavior. More specifically, the preliminary study showed that people facing a lack of congruency in the environment spontaneously engage in cognitive elaboration and decode the servicescape as a manipulative tool used by the service provider to influence his/her behavior in a profitable way. The confirmatory study has then tested and validated the conceptual model we proposed, whereby inferences of manipulative intent mediate the effect of incongruency on approach behavior.

Together, these studies offer several important theoretical contributions. The first contribution lies in the mediating role of inferences of manipulative intent. Consistent with the view from environmental psychology that sees the influence of servicescapes as a three-step process whereby stimuli impact emotions and cognitions which in turn affect behavior (Mehrabian and Russell 1974; Donovan and Rossiter 1982), the pattern of findings show that the cognitive processes here referring to inferences of manipulative intent explain the influence of servicescapes on customer behavior. Importantly, this article sheds a new light on the effect of incongruency in the environment on such inferences. In other words, one explanation for the negative effects of incongruent servicescapes is because they prompt people to find reasons for such incongruency, thus attributing retailers and service providers manipulative intentions associated with corporate goals.

Second, while recent literature has investigated the effects of inferences of manipulative intent in the servicescape on trust and attitude (Lunardo and Mbengue 2013), no research to date has investigated how these inferences occur. The preliminary qualitative study of our research shows that a lack of congruency in the servicescape is likely to lead people to engage in cognitive elaboration, finding reasons for such incongruency. This is because there is a mismatch between the quality of the servicescape and the quality of the merchandise that consumers attention is called, leading them to question about the incongruency.

Third, this research enriches the literature on persuasion knowledge by introducing the in-store environment as a new area of application for the Persuasion Knowledge Model (Friestad and Wright 1994). Previous research on persuasion knowledge has mainly investigated how people cope with persuasion attempts in the field of advertising (e.g., Campbell 1995; Kirmani and Zhu 2007) but this research is one of just a few (Lunardo and Mbengue 2013) to show that the servicescape can be considered as another marketing stimulus that can prompt people to decode such a tool as persuading. Also, this research suggests that consumers cannot be considered as only passive individuals unconsciously responding to the stimuli present in the servicescape. Rather, and consistently with previous research on the Persuasion Knowledge Model (Kirmani and Campbell 2004), consumers should be considered as active interpreters of the servicescape. Consumers have new skills and abilities and are able to understand their environment (Firat and Venkatesh 1995).

Finally, and of importance, this research contributes to the growing literature on servicescapes by exploring their negative effects. While almost all the previous studies on the topic consider the positive effects of servicescapes (see Turley and Milliman 2000), this research demonstrates that servicescapes can under specific conditions of quality incongruency lead to negative cognitive processes – inferences of manipulative intent – which results in less approach behavior. Also, while the
literature emphasizes the need to create elaborate service experiences to promote differentiation and consumer loyalty (Zomerdijk and Voss 2010), we shed light on some limitations of these techniques and show that an important aspect of the servicescape is that they do not lead consumers to perceive it as an incongruent set of distinct stimuli.

Managerial Implications

Although our experiments involved a flower shop, our findings have implications for service environments beyond that of retailing. As highlighted by Morrin and Chebat (2005), various types of servicescapes (e.g., restaurants, repair shops, clinics...) can affect the perceptions and behaviors of the customers of such organizations. As a consequence, the results of this research may hold not only for retailers but also for other types of service providers.

The results here suggest that service providers, such as retailers, hoteliers, banks, and so on, should attempt to match the level of quality of their environment with the level of quality of their products or services. Of importance, this recommendation only holds for retailers and service providers that sell products or services of low quality. In such a case, the results show that the environment can be seen as a manipulative tool that is designed to hide the actual low level of quality of the product or service, which leads consumers to develop negative inferences and less approach behavior. However, for retailers and service providers whose products or services are of high quality, the low or high level of perceived quality of the servicescape does not influence the consumer's inferences of manipulative intent and their behavior. This research may thus be of interest for retailers and service providers being positioned as low or medium price. Retailers such as Wal-Mart or Target may thus be right in providing – as they actually do – their merchandise in environments that do not evoke quality or prestige, exactly as they do. Their environments cannot be considered especially pleasant and of high quality, and such a lack of sophistication in their servicescapes may be seen as a proof of sincerity about the quality of their merchandise, which may also result in positive responses (Lunardo and Mbengue 2013). For others retailers or service providers that provide customers with merchandise of low quality in servicescapes of high quality, it is likely that such incongruency prompts customers to expect high quality merchandise; such expectations when they are not met (Bitner 1990; Mattila and Wirtz 2006; Wirtz and Bateson 1999) and may be harmful when customers face the actual quality of the merchandise and may result in inferences of manipulative intent. It thus appears reasonable to recommend for such service providers to set quality-congruent environments that provide a match between the low qualities of the merchandise and the environment.

A managerial recommendation of potential interest that this research is unfortunately not able to provide is whether retailers could face some consumers that may prefer a lack of congruency and thus a combination of low quality merchandise and high quality store environment. While such a combination may be difficult to attain since low quality merchandise induces low margins and thus financial constraints, it is likely that some consumers – especially those who exhibit a hedonic shopping motivation (Babin, Darden and Griffin 1994) – may prefer high quality servicescapes, even if the merchandise or the service is of low quality. Considering the success of retailers that provide nice environments but sell products that are not of premium quality – such as H&M or Zara – future research should be dedicated to this issue and investigate the conditions where the incongruent combination of low
quality merchandise and high quality servicescapes do not prompt inferences of manipulative intent, or prompt such inferences without those inferences leading to a decrease in approach behavior.

Limitations and Directions for Further Research

This research raises several questions for future investigation. One important topic pertains to the investigation of other types of incongruency. This research focused on the incongruency between the servicescape and the in-store offering, but, as discussed in the theoretical section, two other types of congruency deserve attention. Also, consistently with a wide body of research (e.g., Mattila and Wirtz 2001, 2006; Spangenberg, Crowley and Henderson 1996; Spangenberg, Grohmann and Sprott 2006), this research has found evidence for negative effects of incongruency. However, previous research on congruency suggests that congruency may not exert a linear effect but an inversed U-shaped effect whereby the highest persuasiveness is obtained for moderate levels of congruency (Myers-Levey and Tybout 1989). Therefore, future research may find an interest in studying the effects of a moderate level of (in)congruency, through the use of experimental designs that manipulate three conditions of congruency.

In addition, this research has investigated the mediating role of inferences of manipulative intent in the relationship between perceived incongruency and approach behavior. However, since no alternative hypothesis has been tested, we cannot rule out potential alternative explanations for the effects of inferences of manipulative intent in the incongruency-behavior relationship. Further research should then focus on testing competing explanations for this effect, among which affect may be of interest (Mattila and Enz 2002).

Finally, research in servicescapes may gain in including some potential moderators explaining individual differences in the effect of incongruent stimuli on inferences of manipulative intent. Previous research shows that regulatory focus can be considered as an antecedent of persuasion knowledge activation (Kirmani and Zhu 2007), suggesting that prevention-focused consumers are more likely to activate persuasion knowledge, and would thus be more likely to develop inferences of manipulative intent. As such, regulatory focus would represent an appealing moderating variable to be included in future research on the topic.

REFERENCES


