This is a peer-reviewed, accepted author manuscript of the following research article: Gounaris, S, Chatzipanagiotou, K, Karantinou, K & Koritos, C 2024, 'Revisiting the effects of tourism and hospitality servicescapes on customers: a complexity approach', *Tourism Management*.

REVISITING THE EFFECTS OF TOURISM AND HOSPITALITY SERVICESCAPES ON CUSTOMERS: A COMPLEXITY APPROACH

Abstract: The critical role of built environment (servicescape) on customers' psychological and behavioral responses has been extensively documented in tourism and hospitality. Researchers, however, have relied on a variety of ways to operationalize the servicescape effects on customers' responses, none of which accounts for the subjectivity governing how customers perceive and interact with the servicescape. Through a qualitative and a quantitative study across full-service restaurants, this study demonstrates that customers perceive servicescape components in configurations rather than in isolation, ad hoc groups, or holistically. Moreover, contrary to what past research has declared, customers' future behavioral responses (i.e., approach/avoidance) emerge not in a sequential/linear mode but rather through a complex/combinatory process. On the basis of these findings, the study showcases a set of methods and analytical techniques for helping researchers and practitioners gauge customer-generated servicescape configurations and identify the complex pathways through which such configurations shape customers' behavioral intentions.

Keywords: customers, servicescapes, restaurants, complexity approach

1 Introduction

The term servicescape captures the effects of built service environments, such as restaurants, hotels, or theme parks, on customers' psychological (i.e., cognitive, affective) and behavioral responses (Bitner, 1992). While the study of servicescapes has its roots in the field of marketing (Kotler, 1974), it has attracted for more than four decades the vivid interest of scholars in tourism and hospitality. A keyword search in the EBSCO Hospitality & Tourism Complete database resulted in over 450 papers published during this period, with almost 30% appearing in top tourism and hospitality journals (e.g., Mason & Paggiaro, 2012; Ryu & Jang, 2007; Van der Duim, 2007 – see Table A1 in Appendix A1).

Two reasons explain this surge of interest in tourism and hospitality. The first stems from customers' subjective perception through exposure to different servicescapes: The same individual will form different perceptions about a standard hotel room depending on whether it is decorated in a contemporary, rustic, or minimalist style. Understanding how servicescape management affects customers' responses has thus sparked a long-lasting academic interest. Second, because servicescapes management is critical for their business model (Heide et al., 2007), tourism and hospitality providers invest tremendous amounts of money in designing, constructing, and renovating their servicescapes. The Ritz-Carlton Kapalua in Hawaii, for instance, invested between 2021 and 2023 $100 million in its remodeling, while the Nemacolin Resort in Pennsylvania invested a total of $200 million dollars to upgrade its premises (Olmsted, 2024). This is an ongoing trend in the hospitality industry; a few years ago, the Hyatt conglomerate invested $250m to renovate a single hotel (the Andaz) in San Diego (Statista, 2016).

Likewise, Burger King unveiled a multimillion remodeling plan in 2022: about 100 Burger King locations have so far been renovated as just the first part of an impressive $2.2 billion effort to revitalize and modernize 85% to 90% of its 7,000 U.S. restaurants by 2028 (Lucas, 2024, Lucas, 2022). Such efforts bring immediate results: The Burger King revamped restaurants have already seen a 20 percent increase in sales in 2024 (Coley, 2024). From a business perspective, the return on investment from servicescape interventions can therefore be substantial: increased sales, improved operational efficiency, brand

reinvigoration, improved customer satisfaction, and - equally importantly - boosted employee morale (Balis, 2023).

As our extensive critical assessment of the extant servicescape empirical research demonstrates (see Table A1 in Appendix A), three alternative approaches serve to operationalize servicescapes' investigation. The first and most popular is the *ad hoc* approach (e.g., Ali et al., 2016; Horng et al., 2013), with researchers grouping servicescape elements according to some ad hoc organizing rules (e.g., external environments, internal environments, etc.). The second most popular approach is the *featural*, according to which researchers examine how individual elements of the servicescape, such as the color of the walls, the lighting, the style of furniture, and the frontline employees' attire, exert a unique and separate effect on customers' psychological and behavioral responses. The third approach is the *holistic* or *Gestalt*, which takes the opposite view to the featural approach, assuming that the servicescapes' discrete elements create an overall atmospheric effect on customers' organismic and behavioral responses.

While all three approaches make certain reasonable assumptions about how customers perceive the servicescape, none of them captures how customers subjectively perceive, individually organize, and uniquely respond to the servicescape's stimulation (Bitner, 1992). For instance, past studies from the first group (e.g., Dong & Siu, 2013; Lin et al., 2020) ask customers to rate ad hoc configurations, and by doing so, they are tapping into pre-existing categorizations of servicescapes rather than allowing servicescape configurations to emerge as perceived by the customers themselves**.** Forcing ad hoc configurations masks the subjectivity and the disparity in how customers perceive the servicescape, leaving the associated complexity untangled.

Hence, the first aim of this manuscript is to meet this challenge and demonstrate how to address this complexity and improve the relevance of servicescape-related research by (a) illustrating the theoretical underpinnings and (b) the research design and appropriate analytical techniques that allow customer-centric configurations of the servicescape to emerge. The second aim is to explore how these emergent

configurations explain customers' (cognitive and affective) responses and their reactions (approach and avoidance) under different conditions of information load (acting as a moderating influence).

To meet these aims, drawing from cognitive psychology, we introduce the Configural-cue (Cc) theory (Pearce, 1987) to create a more realistic depiction of the mechanism through which customers make sense of their immediate external environments, including servicescapes. Both cognitive and environmental psychology have eloquently demonstrated that humans perceive their immediate physical external environments in configurations (Pearce, 1987).

At the same time, past servicescape studies assume that the effects of the physical environment are discrete and independent from each other. It is more likely, however, that these effects are combinatory (Pearce, 1987), and that customers' organismic and behavioral responses are affected by combinations of customer-formed servicescape configurations. Hence, we introduce the revised stimulus-organism-response framework (R-SOR) (Jacoby, 2002) to theoretically account for the complexity among customer-derived servicescape configurations and customers' psychological and behavioral responses. Bringing together the Cc theory and the R-SOR model allows us to establish a rigorous theoretical ground upon which to consider the research design and analysis techniques that will allow for the subjective configurations of the servicescape to emerge.

To account for the impact that customers' capacity to process the servicescape stimulation has on how the servicescape configurations (and their subsequent responses) are formed, we also bring information load into the analysis. Environmental psychology (Mehrabian & Russell, 1974b) recommends measuring information load or rate to quantify the degree to which the environment taxes human cognitive resources, which has only received sporadic attention in the pertinent literature (see Kaminakis et al., 2019).

Employing a mixed methods approach and a multitude of analytical techniques (i.e., multidimensional scaling (MDS), hierarchical cluster analysis (HCA), and fuzzy-set qualitative comparative analysis (fsQCA)) we embark on an effort to reveal the customers' emergent configurations

and their effects on customer psychological and behavioral responses. By so doing we address our first aim, and we also respond to the call for expanding the analytical techniques within tourism and hospitality research (Hsu, 2024). The analysis and the discussion of our findings serve the second aim by allowing us to consider the impact of the emergent servicescape configurations in explaining the customers' responses (cognitive and affective) and their reactions (approach and avoidance) under different conditions of information load.

In meeting these two aims, this manuscript makes several contributions. First, this is the first study to take stock of the servicescapes research within tourism and hospitality and demonstrate some key limitations of the operationalizations that have been employed to this point for capturing the main independent variable across these studies, namely how customers perceive servicescapes. Second, this research introduces a fresh theoretical framework (Configural cue theory) with the aim of understanding how customers are likely to make sense of servicescapes (i.e., as configurations). Next, the current research argues that the complex interplay among customers' perceptions of servicescapes, their affective and cognitive reactions, and their behavioral responses, cannot be captured by the widely employed linear frameworks. such as SOR, and instead proposes and tests R-SOR as a more appropriate organizing framework.

Furthermore, this study demonstrates a data collection approach (i.e., combination of qualitative and quantitative studies) as well as a set of analytical tools (i.e., MDS, HCA, fsQCA) that future researchers will need to employ if they wish to capture customers' (rather than researchers') perceptions of servicescapes, as well as for modelling the complex interplay among customers' perceptions of the servicescapes and other important customer psychological reactions and behavioral responses.

Finally, we provide significant new insights regarding the role of information load in customers' interactions with servicescapes. This allows deriving a chart of the activation sequences emanating from the customer interaction with the servicescape. In doing so, we also demonstrate that customers are not equally attentive to all servicescape configurations. For instance, in explaining customers' avoidance

intentions, some configurations become important only when they fall below an expected acceptable level, serving as "hygiene factors." Others attract the customers' continuous attention, leading to approach intentions and as such, acting as "motivating factors.

From a practitioners' perspective, managers from the focal sector of this study (restaurants) directly benefit from our manuscript since we provide them with a "map" of customer-derived servicescape configurations, which can guide their servicescape redesign interventions. Managers from other tourism and hospitality settings (e.g., hotels, museums, theme parks, etc.) also benefit by becoming aware of the significance of the servicescape configurations formation and the research tools for unearthing the customer-derived servicescape configurations of their facilities.

2 Literature Review

2.1 Servicescapes research within tourism and hospitality

Empirical efforts to investigate customer-servicescape interactions within tourism and hospitality could be classified into three groups (see Table 1 and Table A1 in Appendix A). In the first and most popular group of studies (42 papers), researchers look at the impact of different servicescape "configurations" that they themselves have developed ("ad hoc") (e.g., Dong & Siu, 2013; Horng et al., 2013) or most typically have borrowed from past research (e.g., Ali et al., 2016; Gupta et al., 2019).

Table 1: Limitations of past servicescape operationalizations

Indicative paper	Servicescape operationalization	Limitations of approaches	How the present study addresses these limitations
e.g., Lam et al. (2011) [41 more papers*]	**ad hoc** researchers rely on preexisting groupings of servicescape elements or groups derived by factor analytic techniques	• existing groupings of servicescape elements are not customer derived. • factor analytics techniques rely on servicescape elements selected by researchers	customers themselves rather than researchers provide the servicescape environmental descriptors which are created by grouping together the available servicescape elements they perceive
e.g., Wu et al. (2021) [19 more papers*]	**featural** researchers examine the effects of a single servicescape elements (present/absent or high/low) or a combination of two servicescape elements	• no justification is provided as to why customers fixate on single servicescape elements • featural studies employing more than one servicescape elements (most typically two) demonstrate significant interaction effects on customer outcomes.	customers provide the descriptors of the servicescape which account for the subjective way in which they perceive different combinations of the available servicescape elements
e.g., Chang (2016) [12 more papers*]	**holistic** researchers employ a general attitudinal evaluation of the servicescape without reference to any specific servicescape elements or preexisting groupings of servicescape elements	• attitudinal evaluations of servicescapes do not preclude the possibility for individual or groups of servicescape elements to be at play	by providing the servicescape environmental descriptors, customers identify those aspects of the servicescape that are more salient to them, removing less salient aspects of the environment introduced by the holistic approach

** See Table A1 in Appendix A1*

The second largest group (20 papers) focuses on singled out specific elements ("features") of the servicescape (e.g., music, lighting, crowd, scent, etc.) to assess their effect on customer psychological and behavioral responses (e.g., Lv et al., 2022; Saleh & Ryan, 1992). Experimental design and analysis drive this group. Such designs lack external validity though due to their focus on isolating the effects of phenomena that are multifaceted in the real world (Aanstoos, 1991).

Finally, the smallest group of studies within tourism and hospitality comprises studies that look at the servicescape in its entirety (e.g., Kaminakis et al., 2019; Yüksel, 2007), following the "Gestalt" school of thought (Koffka, 1935). Gestalt theorists support the idea that individuals organize the stimulation of the environment in its wholeness (Hergenhahn & Olson, 1997; Tanaka & Farah, 1993).

None of these investigatory paths has sufficiently addressed the subjective and complex customer perceptions of servicescapes. For example, studies from the first group (ad-hoc) have examined "configurations of the servicescape," but these were either constructed by researchers or derived via factor analytic approaches again on the basis of specific servicescape elements selected by researchers and then scored by customers (e.g., Han, 2013; Lin et al., 2020; Taheri et al., 2020). Using ad-hoc configurations masks the subjectivity and the disparity in how various customers actually perceive the servicescape and its elements. "Common sense" is not always or necessarily "common". It can depend on how a person, or a researcher understands the world (Gough & Madill, 2012).

Attempts to generate arrays of servicescape components using factor analysis (e.g., Kim & Moon, 2009; Lam et al., 2011) also fall short in dealing with the complexity underpinning the customer-servicescape interaction (Bitner, 1992; Edvardsson et al., 2018). Tackling such complex phenomena requires different, more appropriate techniques, such as MDS (Cox & Cox, 2001) and fsQCA (Ragin, 2008; Woodside, 2013). These studies, therefore, do not address the subjectivity and/or the complexity governing how servicescape configurations are produced by the customers' interaction with the service environment. This is important because customers receive, interact with, and respond to the stimuli the servicescape generates in a subjective and context-specific way (Bitner, 1992; Holbrook & Hirschman, 1982). As such, this group of studies lacks a customer-centric approach to untangle the complexity of the interaction.

Studies from the second group focus on individual elements of the servicescape. Such studies are missing, however, the complexity of the customer's simultaneous exposure and interaction with different facets of the servicescape (e.g., Baker, 1986; Bitner, 1992). To contextualize, changing a restaurant's

lighting may cause the color of the walls to look different (lighter or darker), which in turn may affect the customers' perceptions of spaciousness and, subsequently, crowdedness. Customers' past experiences and learning can also play a significant role in this (Shepard, 1987). Even the definition of a servicescape element brings about further concerns. An element ["music," for instance] is treated as a simple substance that cannot be reduced into smaller parts. Yet, "music" can indeed be reduced to smaller parts, such as melody, pitch, beat, or style. Treating music as an "element" comes with definitional and operationalization issues (e.g., Madzharov et al., 2015; Mattila & Wirtz, 2001).

Finally, the holistic/Gestalt approach falls short in explaining how the different components of the servicescape forge the entirety of people's perceptions of the environment (Lasaga, 1989). The questions "Gestaltists" do not answer consequently are what servicescape components should be used and how management could elicit the desirable customer responses. Hence, since the mechanisms through which the Gestalt is formed remain undisclosed, these studies fail to address the complexity associated with the customers' interaction with the servicescape (through which the Gestalt emerges).

2.2 Customer-derived configurations of the servicescape

To derive a customer-centric perspective of the process through which customers configure the stimulation coming from the servicescape while overcoming the challenges of past efforts, it is necessary to consider a different theoretical perspective, one that observes the original principles upon which the servicescape research stream was grounded (Bitner, 1992; Kotler, 1974). Configural Cue (Cc) theory represents such a customer-centric perspective. Cc theory provides a framework for understanding how individuals perceive and make judgments about their environment by integrating multiple cues in a configural manner. Cc theory highlights the adaptive nature of perceptual processes and the importance of considering the probabilistic relationships between cues and outcomes (Pearce, 1987). As such, Cc theory aligns with the broader concept of ecological rationality, which posits that cognitive processes are adapted to the specific demands and constraints of the environment. Rather than conforming to normative

standards of rationality, individuals' judgments and decisions are optimized for the ecological context in which they occur (Pearce, 1987; Pearce & Wilson, 1990).

More specifically, according to the Cc theory, while actively interacting with the environment, humans identify different components, but they can only make sense of them by subjectively classifying them into meaningful groups or "configurations" (Goldstone et al., 1991; Pearce, 1987; Pearce & Wilson, 1990). They subsequently respond to a compound stimulus in terms of the unique configuration of its components. Once the compound stimulus (the "configuration") is presented, the individual components may not be identifiable, making them less important than the emergent configurations. Research in associative learning provides ample evidence for these mental processes (e.g., Jozefowiez, 2012; Pearce, 1994).

To illustrate, one can think about how people perceive the sound of a symphony orchestra (Brown, 1991). The orchestral sound originates from the individual sounds of the various instruments; the audience, however, primarily hears the configurations of the sounds coming from the different groups of the orchestra (the wind and the string instruments or the cymbals), which are then "composed" in perceiving the music that the orchestra produces. Thus, The Cc theory is free from all the concerns associated with past studies and allows for a subjective interpretation of the configurations customers form. This is because from a Cc theory point of view, the context, as well as the customer's idiosyncratic characteristics (e.g., learned behaviors or past experiences), are considered to be significant factors conditioning the outcome resulting from the customers' interaction with the various cues [elements of the servicescape] (Goldstone et al., 1991; Jozefowiez, 2012). Yet, the Cc theory has never been considered so far in servicescapes research, possibly because it lacks guidance on how customers form such subjective configurations (Eidels et al., 2008; Farah et al., 1998).

To remedy this, we draw on ordination techniques (cognitive mapping). Contrary to two-dimensional, orthogonal approaches (e.g., factor analysis), cognitive maps bridge spatial and environmental cognition (Kitchin, 1994), allowing an understanding of the environment's physical and social nature (Cohen, 1985). In the servicescape context, this allows cognitive maps to capture the

configural superiority effect of the different servicescape components by estimating customers' perceived distances between alternative components of the environment in a multidimensional space (Fox et al., 2017; Pomerantz et al., 1977), while taking into consideration the customer's past experiences and learned behaviors (Kitchin, 1994).

2.3 Using the Revised Stimulus-Organism-Response framework (R-SOR) to account for the complexity of servicescape effects

Besides the serious operationalization issues in measuring servicescapes, past studies (explicitly or implicitly) rely on the linearity assumption underlying the Stimulus-Organism-Response (SOR) model (Mehrabian & Russell, 1974a). As such, past studies are also open to the limitations and criticism the SOR model has attracted, especially when employed for investigating complex and not necessarily linear phenomena. More specifically, the constructs and relations forming the core components of the SOR model have almost always been depicted as rigid, static 'boxes' that are linear and sequentially linked, making it oftentimes difficult to determine whether certain SOR constructs belong to the stimulus, organism, or response realm (Jacoby, 2002, p.53). This is especially problematic when the phenomena to be modeled are fluid and dynamic rather than linear (Jacoby, 2002), such as in the case of the customer-servicescape interaction (e.g., Edvardsson et al., 2018). In such cases, the revised SOR (R-SOR) framework (Jacoby, 2002) is a more appropriate approach to follow.

As Figure 1 illustrates and explains, the R-SOR model does not display the main components of the model in a sequential manner (S->O->R) but in a Venn diagram demonstrating them as overlapping circles. In this vein, the R-SOR model recognizes the process as complex, fluid, and dynamic instead of rigid and sequential. The model allows the interplay between S, O, and R and detects seven sectors as core in exploring different aspects of consumer behavior, namely: Sector 1= encounter environment; Sector 2= Automatic responses for which consumers are not aware; Sector 3= Experiential Storehouse (consumers' general emotive and cognitive systems, including all retained prior experiences, beliefs, predispositions, etc.); Sector 4 = Consumers' Consciousness; Sector 5 = Non-trace Stimulus-Response Events; Sector 6

= Internal Responses (outcomes such as changes in beliefs, attitudes, intentions, impressions, that are not directly visible to an outsider); and Sector 7 = External Responses (referring to all those responses that are or in some cases can be made to be externally detectable-including nonverbal, verbal responses, etc.) (Jacoby, 2002).

The study focuses on Sector 4, which attracts the most attention, representing consumers' consciousness (Zaltman, 2000, p. 427). In other words, it means their cognitive workspace, assuming that consumers generally do not stop everything to process incoming stimuli sequentially (Bigne et al., 2020; Jacoby, 2002). It represents the confluence of the model's S, O, and R components. Therefore, it allows us to understand how consumers subjectively organize the servicescape's components, interpret their meaning, and construct their cognitive, affective, and behavioral responses, which aligns perfectly with the core tenets of the Cc theory complementing the theoretical underpinning of our investigation. R-SOR also acknowledges the dynamic nature of the process by recognizing that individuals' psychological states and responses can change over time in response to varying environmental stimuli and internal factors. Hence, compared to the SOR model, R-SOR allows for considering the impact of moderating variables in explaining the behavioral outcomes of a person's interaction with the cues the environment generates. Consequently, the R-SOR model provides a more comprehensive understanding of the underlying processes that link environmental stimuli to behavioral responses (Jacoby, 2002).

Figure 1. Conceptual Differences Between Existing Studies and the Current Study

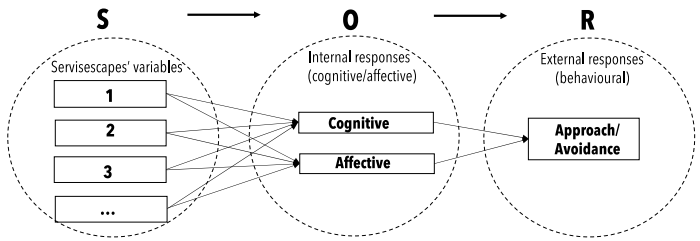
Existing Studies

"Effects of Causes" approach (Regression-based techniques)

Main Assumptions:

a) **A predetermined set of servicescapes variables** (e.g., music, noise) or its entirety
b) **Linear relationships**: examination of the net effect of each of these variables on the intermediate or final outcome of interest
c) **"One fits all" solution:** This does not allow the identification of multiple causal solutions/interpretations.
d) **Symmetric relationships**
e) **Concept of causation:** correlational relationships; probability/statistical theory

S-O-R Model (S, O, and R in a sequential manner - A linear model)



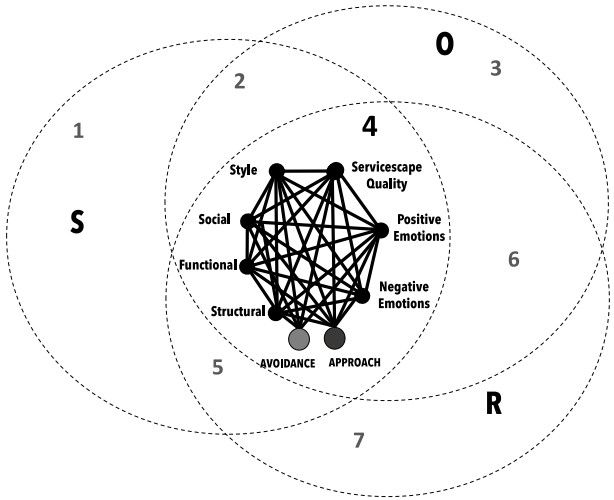
The Study's Rationale

"Causes of Effects" approach (FsQCA)

Main Assumptions:

a) **Consumer-Derived configurations:** Consumers subjectively defined the servicescapes' components
b) **Complex relationships:** Complex interrelationships occur between consumers' perceptions and cognitive and affective responses. (Complexity).
c) **More than one solutions** lead to the outcome of interest (Equifinality)
d) **Asymmetric relationships**: Combinations of conditions leading to an outcome of interest (approach) are unique and not the mirror opposites of those that lead to a different outcome (avoidance)
e) **Concept of causation:** Identification of necessary and sufficient conditions/combinations of conditions

Revised S-O-R Model (An interplay between S, O, and R – A complex, fluid, and dynamic model)



Sector 1= Encounter environment; **Sector 2**= Automatic responses; **Sector 3=** Experiential Storehouse; **Sector 4** = Consumers' Consciousness; **Sector 5** = Non-trace Stimulus-Response Events**; Sector 6** = Internal Responses;; and **Sector 7** = External Responses

Adapted from Jacoby (2001)

Furthermore, the R-SOR framework calls for a mind-shift from an "effect-of-causes" approach (typical for the SOR) to a "causes-of-effects" approach. The latter allows an understanding of how each servicescape configuration impacts customers' psychological and behavioral outcomes by identifying the specific causes of the effects (Mahoney & Goertz, 2006). This approach also allows for identifying those critical servicescape configurations without which it is impossible to explain the impact on customers' psychological and behavioral responses (Mackie, 1980; Ragin, 1987, 2000). In addition, this approach can unveil multiple causal paths to the same outcome rather than a single path representing the weighted sum of each servicescape configuration on customers' psychological and behavioral responses (Alexander & Bennett, 2005; Hicks et al., 1995).

The first step for implementing a "causes-of-effects" approach is to define the outcome variables (effects) of interest. According to the pertinent literature (see Table A1 in Appendix A), we focus on the most typical psychological (organismic) response to servicescape, emotional responses, and the most typical behavioral response, namely approach and avoidance behaviors. The emotional responses to environmental stimuli can be distinguished based on their valence into positive and negative (Mehrabian & Russell, 1974a). Negative emotions should, however, not be treated as the opposite of positive emotions or vice versa (Watson & Tellegen, 1985; Watson et al., 1999). This is important because the servicescape configurations can trigger positive (e.g., pleasure from the social components of the servicescape) and/or negative (e.g., repulse from its functional components) emotions at the same time. Importantly, the impact of positive emotions on the customer's subsequent response depends on the level of negative emotions and vice versa (Barclay & Kiefer, 2014; Fredrickson, 2001).

Regarding the behavioral responses, the prevalent approach (see Table A1 in Appendix A) is also grounded in environmental psychology (Mehrabian & Russell, 1974a), looking at approach and avoidance behaviors (e.g., money spent, revisit intentions, etc.). In line with SOR and its linear perspective, however, "avoidance" intentions have silently been considered as the (linear) opposite of "approach." Nonetheless, the choice to revisit is complex (Rosenbaum & Massiah, 2011; Seamon, 1979), which explains why, in reality,

the two are not the (direct) opposites of a single construct because each comes with different antecedents (Tombs & McColl-Kennedy, 2003). In other words, the asymmetric relationships underlying the R-SOR model further suggest that consumers' approach and avoidance behaviors are separate functions with differential activation processes and distinguishable antecedent conditions (Jacoby, 2002; Ragin, 2008; Woodside, 2013, 2014). Hence, the need for an independent investigation of the combinations ("recipes") leading to avoidance is equally important, allowing the simultaneous explanation of both (approach and avoidance) outcomes (Bitner, 1992; Mehrabian & Russell, 1974a).

This also allows for the nexus between the perceived servicescape configurations and customer psychological (organismic) responses to explain customer behavioral responses sufficiently and appropriately (Ragin, 2008; Ragin & Rihoux, 2004). According to the conjectural causation approach and the equifinality principle, each of the two alternative behavioral outcomes (approach/avoidance) is potentially explained by more than a single combination ("recipes") of antecedents. To test this thesis, we put forward the following research propositions:

RP1 (a): The customer's approach behavioral intentions emerge from combinations of high scores in the customer's cognitive evaluation and high scores of positive affective responses the servicescape configurations stimulate.

RP1(b): The customer's avoidance behavioral intentions emerge from combinations of low scores in customer cognitive evaluation and high negative affective responses the servicescape configurations stimulate.

2.4 The role of information load

In restaurants, customers receive a barrage of information (Kutty et al., 2020; Singer et al., 2013). Hence, in this context, the customers' ability to handle the specific information and the stimulation that a restaurant's servicescape produces condition their approach/avoidance intentions (Kaplan & Kaplan, 1989; Lunardo et al., 2016; Orth & Wirtz, 2014). Proxies, such as information load, accounting for the stress from excessive environmental stimulation that goes beyond an individual's capacity to manage this stimulation (Milgram,

1970; Russell & Mehrabian, 1976), allow assessing the customer's cognitive capacity to deal with this situation in real-life [non-laboratory] conditions.

People seek to optimize the amount of stimulation they receive from the environment. Deviations from this optimum level generate stress, affecting the relationship between affect and cognition (Rapoport, 1976). Thus, the amount of information load the environment generates will directly relate to the degree of arousal the environment will induce (Donovan & Rossiter, 1982). During their interaction with the servicescape, customers decode the information they receive and cognitively process the stimulus, provided they do not become overloaded by this information and stimulation. Otherwise, if they become stressed beyond their cognitive capacity to process information, customers retreat to heuristics, and the affective reckoning of the stimulus dominates (Chaiken & Trope, 1999; Sivaramakrishnan & Manchanda, 2003).

Hence, the information load is expected to moderate the combinations (recipes) that explain approach and avoidance intentions. When customers perceive high levels of information load, affective reactions will be salient within the recipes that explain their approach and avoidance intentions, and *vice versa*. On these grounds, the following research proposition describes this moderation effect for information load:

> *RP2: Information load differentiates the combinations of the customer's cognitive evaluations and affective responses towards the servicescape components in producing the customer's approach and avoidance behavioral intentions.*

3 Research Methodology

3.1 Study 1: Qualitative identification of servicescape configurations

With this first study, we sought to identify the different components of the servicescape that customers attend when they are exposed to servicescapes in a restaurant. We also sought to generate an appropriate pool of items to assess customer attention to specific environmental components. Since it is impossible to include every environmental component (Russell & Mehrabian, 1976), we followed the approach recommended by

Greenland and McGoldrick (2005). We focused on the components to which customers attend because of their past and present interactions with a specific servicescape (Russell & Mehrabian, 1976).

In total, 54 personal, semi-structured interviews were conducted. To account for different dining instances, the selection process introduced habits and occasions to reflect "learned behaviors" and "motivation." A snowball approach allowed for identifying participants who would qualify and meet the selection criteria (see Table A1 in Appendix A), starting with friends and peers who fulfilled the selection criteria. They were then asked to name people they believed would be willing to participate. New nominations were sought until we reached information saturation among the eligible participants (54 interviews).

Eligible participants were invited to recall and reflect on their own restaurant experiences and gradually we guided the discussion to the restaurant environment. To avoid imposing on the respondents any conceptualization or terminology that would hinder the accurate reflection of their evaluations, priorities, and interpretations, we asked them to describe the restaurant environmental aspects that they themselves usually attend to. They were also asked to discuss how important these aspects were in shaping their subsequent overall behavior. This process produced a pool of 25 restaurant servicescape components/descriptors. We then presented all 25 restaurant servicescape components/descriptors to two senior marketing PhD students, who were unaware of the study's overall goal and how these 25 restaurant servicescape components/descriptors were created. Students were asked to independently check whether any of these 25 restaurant servicescape components/descriptors could be merged with another component/descriptor. Both students came up with the same 18 components/descriptors that should remain unmerged. Following discussion and further clarification, six of the remaining seven components/descriptors merged into three components/descriptors, resulting in 21 unique restaurant servicescape components/descriptors. Then a semantic differential scale was attached to each of these 21 unique restaurant servicescape components/descriptors (see Appendix A3). This battery of the 21 restaurant servicescape components/descriptors informed the quantitative study that followed.

3.2 Study 2: Quantitative assessment

Data collection for the quantitative study took place in Athens (Greece), a major tourism destination in the Mediterranean Sea (Euromonitor, 2023) in the month of July, during the peak of the tourism season. We used several popular Athens city tourist guides (available both in print and online) to build the pool of restaurants most likely to be visited by tourists in Athens. We complemented this pool with additional restaurants located in areas of tourism highlights/attractions, but not mentioned in any of the city tourist guides we reviewed. Using the six categories of restaurants employed in the city tourism guides we grouped the compiled pool of restaurants into "local cuisine" (n=24), "taverns" (n=58), "international cuisine" n=29, "bar & club restaurants" (n=22) "music restaurants" (n=12), and "all-day café restaurants" (n=75).

Next, a random stratified selection process was used, with the number of restaurants per category drawn randomly but proportionately to the restaurants in each category, resulting in 110 restaurants. Eight restaurants declined to provide the research team with access to customers at the time of dining, leaving a sample of 102 restaurants to collect data from. Using a structured questionnaire, 12 customers (on average) from each of the 102 restaurants across different days and times of the week (to reduce time/day systematic variation bias), were approached while sitting in the restaurant and requested to fill in a brief paper and pencil questionnaire. Customers had to be native English speakers (the questionnaire was administered only in the English language), visiting Athens as part of their summer vacations. This process yielded 1,145 usable responses, almost evenly distributed across gender and age groups.

The extant literature and the findings from Study 1 informed the measures used in the quantitative study. We relied on the 21 items that emerged from Study 1 to measure the effects of the restaurant servicescape components/descriptors. We also relied on Izard's (1977) instrument (DES-III) to measure customers' emotions. We used the physical environment quality factor from Brady and Cronin (2001) to capture the customer's cognitive evaluation of the servicescapes. The semantic differential scale originally developed by Mehrabian and Russell (1974b) and adjusted for consumption contexts by Donovan and Rossiter (1982) was employed to capture information load. Finally, to assess approach/avoidance, we asked participants to indicate how likely they were to revisit this restaurant during their stay in Athens, using a seven-point semantic differential scale anchored from "Very Unlikely" (suggesting avoidance) to "Very Likely" (suggesting approach).

4 Analytical techniques

The analysis and testing of the research propositions were completed in three stages. Stage one looked at the quality of the data in terms of common method variance. Next, using multidimensional scaling (MDS) and hierarchical cluster analysis (HCA), we sought to generate a customer-centric perspective of the stimuli configurations of the servicescape customers perceive while dining. Finally, in stage three, we employed fsQCA to examine the research propositions underpinning this investigation. Each stage is described separately and in detail in the following sections.

4.1 Stage One: Preliminary Analyses and Data Quality Assessment

Given the cross-sectional nature of our data collection, the first task was to examine the degree to which systematic method bias was present in the dataset. Following Richardson et al. (2009) suggestions, we employed the CFA marker variable approach using "interaction quality," which captures the customers' perceptions of the quality of interactions with service employees, as the marker variable (Brady & Cronin, 2001). This variable is not entirely unrelated to the study's substantive variables (Richardson et al., 2009), but it does have the lowest correlation with them (Lindell & Whitney, 2001). Moreover, perceived interaction quality is arguably responsible for several biases in participant responses, such as providing socially desirable/acceptable answers or trying to maintain consistency in the responses. This choice aligns with the "marker variable" approach (Williams et al., 2010). The results from this test showed that none of the loadings associated with the marker variable were related to any of the items in the constructs. Thus, method bias is not a concern.

4.2 Customer-Centered Perceptions of the Servicescape

To generate a customer-centric perspective, we relied on ordination techniques. Several options are available, but the most commonly employed one is multidimensional scaling (MDS) (Ferguson et al., 1997; Holyoak & Mah, 1982). Compared to other techniques (e.g., factor analysis), MDS can represent non-linear

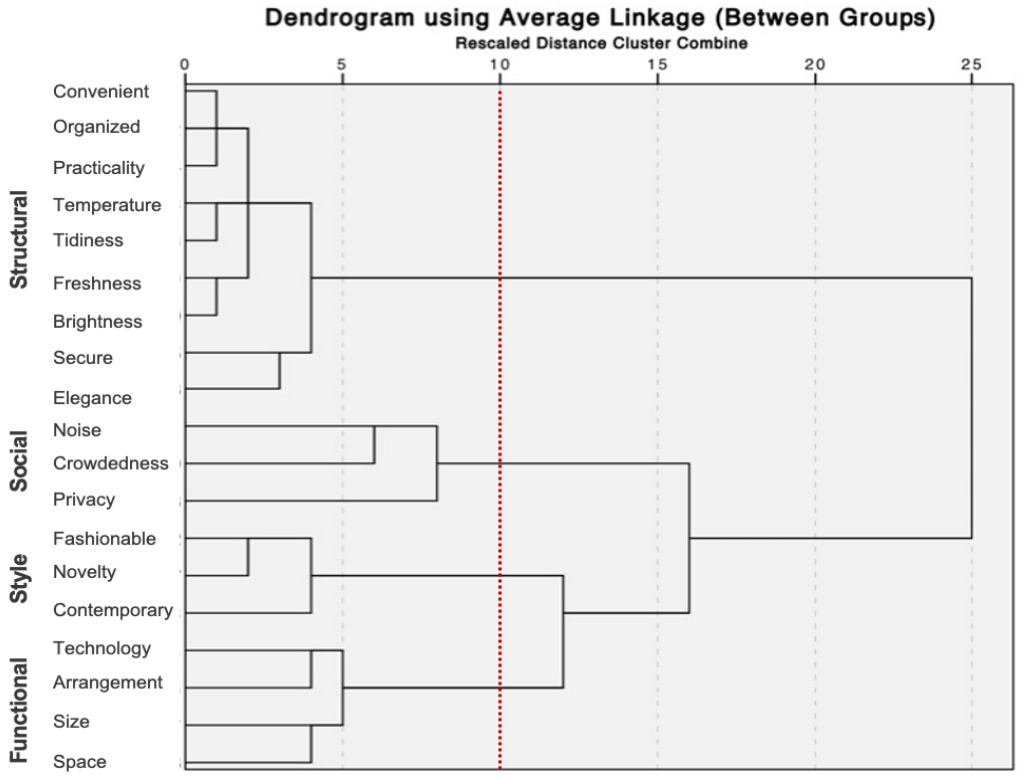
relationships, making it the most appropriate one for the purposes and the design of our study (Ding, 2013). MDS calculates the distances between the components of the physical environment in a multidimensional space to produce a graphical illustration of the cognitive map of the servicescape. The smaller this distance is, the more similarly customers perceive these components.

Post hoc assessment of the 21 environmental components produced by the pre-study suggested that "user friendliness" suffered from content validity issues; thus, it was dropped from subsequent analyses. "Diversity" also overlapped with "distinctiveness." The latter is a more typical component of the servicescape, so the former was also dropped. The final set of the servicescape components, which observed the assumptions underlying the use of MDS and were subsequently employed in further analysis, was thus reduced to 19 (see Appendix A3).

Notably, the results from MDS analysis can be limited in two ways: the subjective interpretation of the dimensions resulting from the analysis and the difficulty in classifying and grouping specific variables (environmental components) (Carroll & Green, 1997). Subjectivity is not a concern in this case, however, because MDS was employed to explore the participants' subjective configurations of the servicescape. To deal with the grouping and classification concern, we combined MDS with HCA. Following the procedure suggested by Viswanathan et al. (2007), we used the position vectors of all the servicescape environmental components across all the dimensions MDS produced as input data for the HCA.

The dendrogram from the HCA analysis (Figure 2) suggests that the four clusters solution best reflects our data. The first and larger cluster comprises eight servicescape components: organized, practicality, temperature, tidiness, freshness, brightness, security, and elegance. We called this cluster the *"structural" configuration* of the servicescape as it reflects the fundamental (basic) configuration customers generate while dining. The second cluster comprises such components as crowdedness, noise, and privacy. This cluster suggests a configuration around the *"social"* aspects of dining. A third cluster comprises three components, namely novel, fashionable, and contemporary, suggesting a configuration capturing customers' perceptions of a restaurant's *"style"*. Finally, the fourth cluster consists of four components, namely space, size, arrangement, and technology/equipment, implying a configuration that captures an environment that allows the restaurant to deliver its services effectively. We thus called this the *"functional" configuration*.

Figure 2. Results from the hierarchical cluster analysis



4.3 Psychometric Assessment of Constructs and fsQCA results

Using the result from the HCA, we generated latent variables to capture the configurations of the servicescape components and test the research propositions. Before this testing, a series of confirmatory factor analyses (CFA) allowed the assessment of the psychometric properties of the variables. The results (see Appendix A3) provide support for the four-factor structure of the servicescape components, the two-factor (i.e., positive/negative) structure of emotions proposed by Izard (1977), and the three-factor structure (ambient conditions, design, social factors) of servicescape quality as suggested by Brady and Cronin (2001). Table 2 summarizes the descriptive statistics and the correlation coefficients among the study's conditions. The results demonstrate that all the coefficients are below the 0.80 threshold (Woodside, 2014), confirming no symmetrical relationships between them. Hence, using fsQCA, is appropriate for further analysis to account for the complex, asymmetrical nexus of relationships (Ragin, 1987; Woodside, 2014) among the perceived

configurations of the servicescape as derived by the analysis (stage 2) of the 21 unique servicescape descriptors the 54 semi-structured interviews of the qualitative study produced (*Appendix 3* provides a detailed explanation of the method, the analytical procedure, and the reasons fsQCA is uniquely suited for examining the study's research propositions).

Table 2: Correlations among study variables

	Mean	Std. Deviation	1	2	3	4	5	6	7
1. Structural	3.5	0.706							
2. Social	2.7	0.739	0.549**						
3. Style	3.1	0.955	0.448**	0.281**					
4. Functional	3.8	0.707	0.735**	0.380**	0.407**				
5. Perceived Servicescapes Quality	4.8	1.05	0.638**	0.446**	0.445**	0.610**			
6. Positive emotions	4.6	1.21	0.518**	0.319**	0.330**	0.525**	0.596**		
7. Negative emotions	1.4	0.891	-0.337**	-0.058*	-0.081**	-0.363**	-0.273**	-0.237**	
8. Revisit	4.3	1.41	0.368**	0.293**	0.192**	0.353**	0.561**	0.513**	-0.088**

*** Correlation is significant at the 0.01 level (2-tailed).; * Correlation is significant at the 0.05 level (2-tailed).*

The results from testing RP1 (a and b) appear in Table 3. In line with standard fsQCA procedures (Ragin, 2008; Schneider & Wagemann, 2010; Woodside, 2013), we only focus on and consider the most empirically relevant solutions (raw coverage >.30). Although there is no universally accepted threshold for overall coverage as it may depend on the research context and the complexity of the analysis, most researchers agree that a coverage between .25 to .65 can be viewed as a good indicator of the empirical relevance of the fsQCA results (e.g., Pappas & Woodside, 2021; Ragin, 2008; Skarmeas et al., 2014; Woodside, 2013).

Our results demonstrate that approach and avoidance represent different notions because each is explained by more than a single combination (recipes) of customers' cognitive and affective reactions towards a restaurant's servicescape. Moreover, none of the recipes the analysis has produced is common in explaining both. Hence, based on the findings, we can accept both RP1(a) and (b).

Solution 1 (raw coverage=0.40 and consistency=0.82, see solution 1, Table 3) shows that most customers' intention to revisit (approach) a restaurant relies mainly on their affective reactions to the servicescape configurations. Customers' fulfilling affective state (high positive and low negative emotions) produces this intention. This is a purely affective decision but not the only one. Solution 2 (raw coverage=0.36 and consistency=0.80, see solution 2, Table 3) captures an alternative recipe in which customers' strong positive emotions combine with the social aspect of the servicescape in explaining the customer's intention to approach. Finally, solution 5 (raw coverage=0.31 and consistency=0.82, see solution 5, Table 3) demonstrates that the customers' highly positive emotions and cognitive perception of the servicescapes' quality interplay with mainly the functional configuration to elicit approach intentions. To help the reader better understand the results from fsQCA, Figure 3 offers a diagrammatic reading of the most empirically relevant solutions explaining approach and avoidance intentions.

Table 3. Results for high (approach) and low (avoidance) scores in customer intentions to revisit

	Outcome Variable:								
	Approach (High scores in Revisit)					**Avoidance (Low scores in Revisit)**			
	Solutions					Solutions			
	1	**2**	**3**	**4**	**5**	**1**	**2**	**3**	**4**
Conditions tested:									
Structural				●	●	❍		❍	❍
Social		●	●	●					
Style				●	●	❍	❍	●	
Functional			●		●	❍	❍		●
Perceived SQ	●		●	●	●	❍	❍	❍	❍
Positive emotions	●	●		●	●	❍	❍	❍	❍
Negative emotions	❍	❍	❍					●	●
Raw coverage	0.40	0.36	0.19	0.29	0.31	0.41	0.32	0.16	0.13
Unique coverage	0.04	0.02	0.06	0.006	0.01	0.03	0.02	0.006	0.004
Raw consistency	0.82	0.80	0.81	0.80	0.82	0.83	0.80	0.86	0.85
Overall solution coverage	0.57					0.46			
Overall solution consistency	0.80					0.81			

Notes: (1) *Black circles (●) indicate high scores of a condition. White circles (❍) indicate low scores. The large circles indicate core conditions; the small circles indicate peripheral conditions. Blank spaces indicate "don't care" conditions;* ***(2)*** *The analysis of necessary conditions (NC) does not confirm the existence of any NC.*

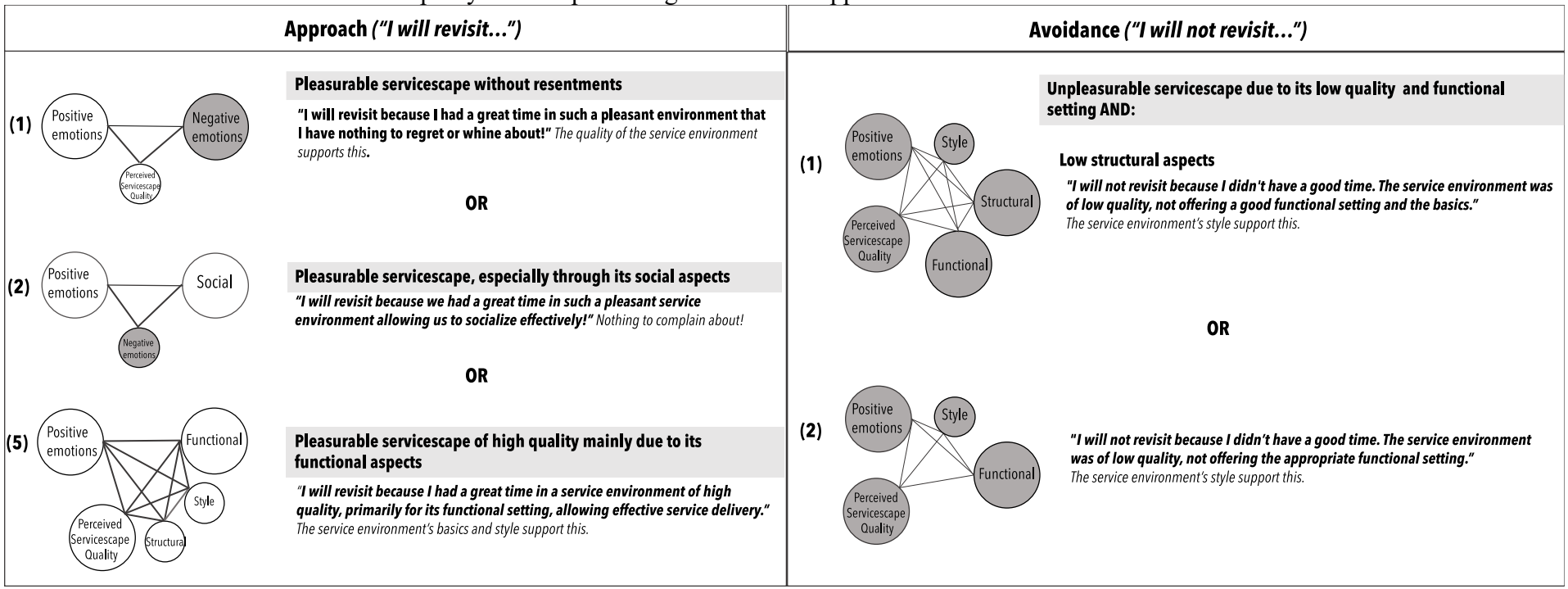
In summary, the results of the analysis show three core causal recipes explaining the customer's approach intention. In all three, emotions are dominant (core condition), manifesting the importance of

emotions for approach intentions. Regarding the servicescape configurations, the customers' attention to the social and functional configurations interplay with the customers' emotions in generating approach intentions.

Figure 3 also presents the combinations of the core and peripheral conditions explaining the customer's avoidance intentions. The analysis has produced two empirically relevant solutions, none of which is similar to the recipes explaining the intention to approach. In both solutions, low positive emotions and low cognitive evaluations are witnessed interplaying with the servicescape configurations in explaining customers' intention to avoid the company in the future. Interestingly, none of the two empirically relevant recipes explaining avoidance entails customer's negative emotions. This is unsurprising (Higgins, 1989; Van Dijk et al., 1999). The absence of negative emotions from the recipes explaining avoidance intentions shows that not having the positive emotions the customer expected is enough to explain avoidance (Van Dijk et al., 1999). These results provide evidence in support of both RP1 (a) and (b).

The purpose of RP2 is to probe further into the approach and avoidance intentions by looking at the moderator role of information load. Table 4 reports the results, while Figure 4 offers a more comprehensive visual summary of this analysis. Figure 4 makes evident that when customers perceive a low information load, their approach intention results from a strong and positive cognitive evaluation of the servicescape (Solution 1, modes a and b). In contrast, when the perceived information load is high, the cognitive evaluation of the servicescape becomes extraneous to the recipe explaining the intention to approach (solution 2, modes a and b). In such environments, the outcome (intention to approach) mainly depends on forming a self-fulfilling affective state regulated by strong positive and weak negative emotions.

Figure 3. Diagrammatic representation of the most empirically relevant Core-Periphery Models producing Customers' Approach and Avoidance Behaviors



Notes: ***(a)*** *The number presented in each solution corresponds to solutions in Table 3 for Approach and Avoidance, respectively;* ***(b)*** *White circles represent high condition scores; shaded circles represent low condition scores. Large circles represent core causal conditions; small circles represent peripheral conditions;* ***(c)*** *Quotes for each solution exemplify how customers could have explained it in their own words.*

Figure 4 reveals a similar pattern when looking at the customer's intention to avoid. This is a significant finding, reconciling what so far could read as "divergent" results. Some past investigations reported that the customer's response to the servicescape primarily results from cognitive reactions, while others supported that affective reaction mechanisms drive this response (e.g., LeDoux, 1996; Smith & Lazarus, 1990). Apparently, both can be true depending on the context (Lai et al., 2012), but crucially, on the customer's ability to handle the information load the servicescape generates. These results provide evidence in support of RP2.

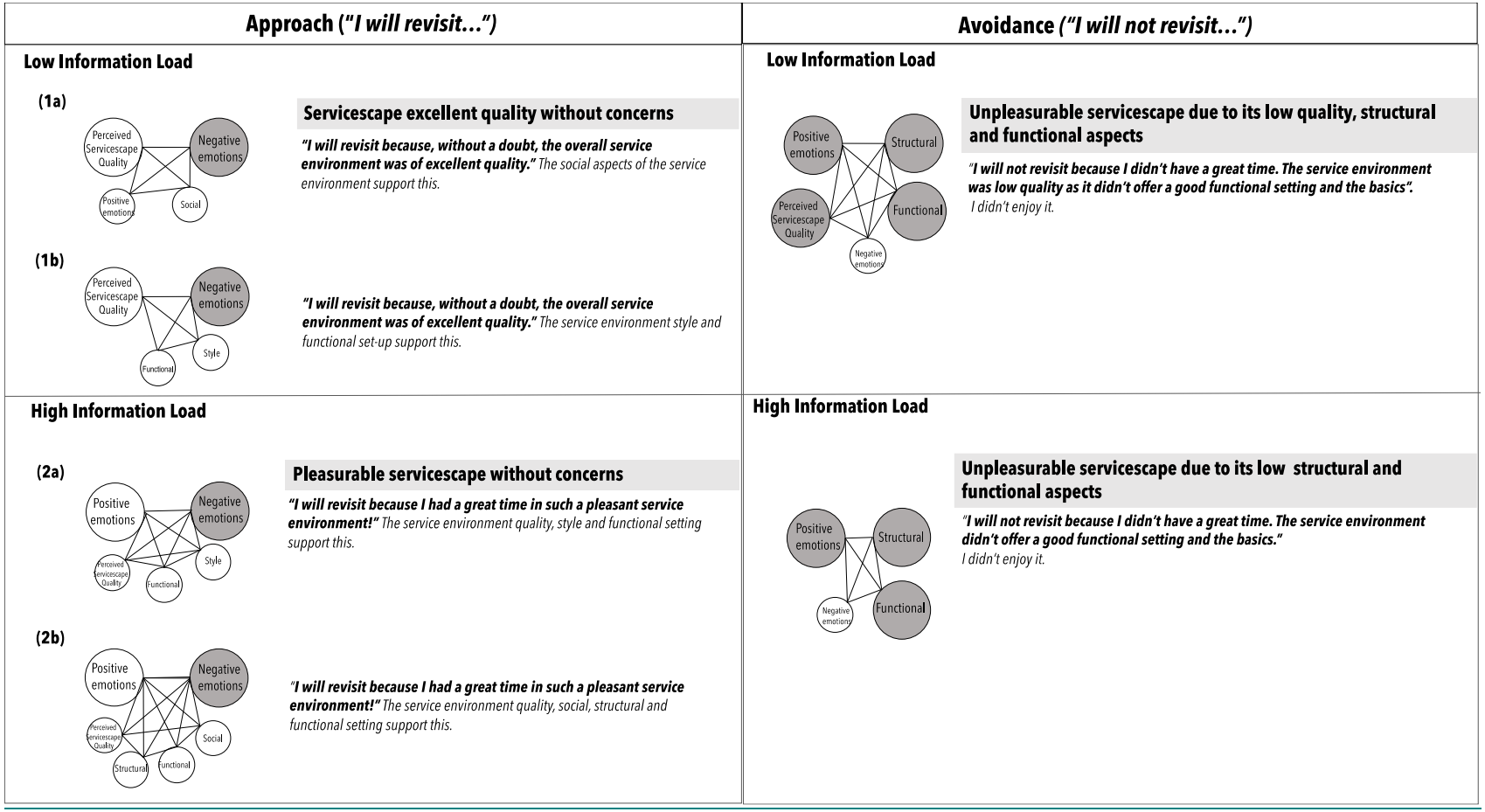
Figure 4 also offers further insights regarding the recipes leading to approach and avoidance intentions (under different conditions of information load), particularly in relation to the customer's attention to specific servicescape configurations, which subsequently trigger specific reaction mechanisms. For instance, when the information load is high, the intention to avoid comes from the customers' attention to the structural and functional configurations, which interplay strongly with low positive emotions in explaining avoidance. However, when the outcome of the customer-servicescape interaction is approach intentions, the customers' attention will also include the social and style configurations, neither of which is part of the recipes explaining avoidance. A similar picture appears when looking at approach vs. avoidance intentions under conditions of low information load: customers attend to different servicescape configurations in each case. This is the first empirical evidence showcasing that not all the components of the servicescape -and the configurations they feed into- play the same role in explaining the customer's response (Baker, 1986): some fit the description of a "motivation factor," while others represent that of a "hygiene factor" (Herzberg, 1964).

Table 4. The moderating role of information load: customers' intention to approach and avoid

	Outcome variable:					
	A. **Approach (High scores in consumers' Revisit)**					
	(Low Info load)			**(High Info load)**		
	Solutions			Solutions		
	1		**2**	**1**	**2**	
Conditions tested:	(a)	(b)			(a)	(b)
Structural			●			•
Social	•		•	•	•	•
Style		•	●	❍	•	
Functional		•	❍	•		•
Perceived SQ	●	●	●	●	•	•
Positive emotions	•		●		●	●
Negative emotions	❍	❍			❍	❍
Raw coverage	.33	.29	.11	.16	.36	.26
Unique coverage	.006	.03	.02	.05	.17	.05
Raw consistency	.80	.82	.82	.88	.87	.87
Overall solution coverage	.39			.50		
Overall solution consistency	.80			.86		
	B. **Avoidance (Low scores in consumers' Revisit)**					
	(Low Info load)			**(High Info load)**		
	Solutions			Solutions		
Conditions tested:	**1**			**1**		
Structural	❍			❍		
Social						
Style						
Functional	❍			❍		
Perceived SQ	❍					
Positive emotions	❍			❍		
Negative emotions	•			•		
Raw coverage	0.30			0.34		
Unique coverage	0.30			0.34		
Raw consistency	0.89			0.80		
Overall solution coverage	0.30			0.34		
Overall solution consistency	0.89			0.80		

Notes: (1) *Black circles (●) indicate high scores of a condition. White circles (❍) indicate low scores. The large circles indicate core conditions; the small circles indicate peripheral conditions. Blank spaces indicate "don't care" conditions;* ***(2)*** *The analysis of necessary conditions (NC) does not confirm the existence of any NC.*

Figure 4. Diagrammatic representation of the most empirically relevant Core-Periphery Models producing Customers' Approach and Avoidance Behavior under Low and High Information Load.



Notes: ***(a)*** *The number presented in each solution corresponds to solutions in Table 4 for Approach and Avoidance, respectively;* ***(b)*** *The analysis grouped core-periphery models based on their core conditions allowing the detection of the same solution in different modes e.g., solution 1 (same core conditions) in two different modes (a) and (b) based on their peripheral conditions;* ***(c)*** *White circles represent high condition scores; shaded circles represent low condition score. Large circles represent core causal conditions; small circles represent peripheral conditions;* ***(d)*** *Quotes for each solution exemplify how customers could have explained it in their own words.*

5 Discussion and Contributions

5.1 Theoretical contributions

Two aims underpin this study. The first is to demonstrate how to improve the relevance of servicescape-related research by illustrating the theoretical foundation, the research design, and the appropriate analytical techniques that allow customer-centric configurations of the servicescape to emerge. The second is to explore how such emergent configurations explain the customers' responses (cognitive and affective) and their reactions (approach and avoidance), under different conditions of information load (moderator), thus improving the ecological validity when studying servicescape-customer interactions.

To deliver this, there is a need to expand the analytical techniques within tourism and hospitality research (Hsu, 2024), which in turn requires a paradigm shift in how researchers ground and frame the way customers interact with the service environment. This is because of the complexity engrained in this interaction. Customers conceive diverse service environment components differently (Edvardsson et al., 2018; Rosenbaum et al., 2009). Hence, it is rather hard to systematically approach the investigation of the customer-servicescape interaction, especially from the linearity the SOR model enforces. This possibly explains why the extant literature is presently missing the customer-centric perspective. Responding to this necessity, we relied on the Cc theory and the R-SOR model.

Specifically, Cc offers theoretical grounding from the cognitive psychology perspective, while R-SOR allows us to overcome the linearity limitation when dealing with such complex phenomena. Together, the two deliver a fresh angle for taking the empirical investigation of the customer-servicescape interaction forward, allowing for a better reflection of real-life situations and the introduction of a more customer-centric perspective within this stream of research. While this is an important theoretical contribution, adopting the Cc and R-SOR necessitates a novel research approach. Hence, the second contribution to academic research this study makes is to showcase the methodological approaches (i.e. combination of qualitative and quantitative data collection) and analytical tools (MDS, HCA, fsQCA) that fit this new paradigm, allowing for a systematic approach to tackle the customer-servicescape interaction.

Another contribution this study offers comes from untangling complexity in the way servicescape configurations affect customer behavioral responses while also addressing some questions that have puzzled researchers for years, such as the role of emotions as part of the activation mechanism that the interaction with the servicescape produces (e.g., Lai et al., 2012; Lunardo et al., 2016; Pareigis et al., 2012). Our results show that approach intentions always relate to strong positive emotions as core conditions, and in one recipe, when coupled with low negative emotions, deliver the expected outcome (approach intention). Notably, the intention to avoid a servicescape in the future does not include strong (high) negative emotions as a core condition in either of the two recipes the analysis has produced. This is not a surprise because of the fundamental difference between "getting -or not- what you want" (leading to the formation of positive emotions, or their absence) and "getting -or not- what you do ***not*** want" (leading to the formation of negative emotions, or -again- their absence). Within the confines of our investigation (studying only the interaction between the customer and the servicescape), we can claim that negative emotions are not as important as one might have thought in explaining customers' future behavioral intentions.

Moreover, our customer-centric approach to the management of the servicescape steered us to introduce information load as a moderator, and the results are noteworthy. What in the past would appear to be "divergent" and confusing results are no longer so. The customer's ability to handle the servicescape stimulation conditions the activation sequence. As long as customers can handle the overall stimulation the servicescape generates, they will first activate cognitive processing of this stimulation before allowing emotions to emerge. When not, emotions emerge first before customers manage to (cognitively) rationalize their feelings. So, in addition to the context (e.g., Lai et al., 2012), the activation sequence is also dependent on the customer-servicescape interaction and the customer's ability to process the stimulation coming from the environment.

Recording the moderating role of information load in the customer-servicescape interaction has allowed us to realize that customers are not equally attentive to all the configurations they perceive in the service environment. Customers only attend to some of them when these configurations fall below their expectations, leading to avoidance. Such configurations stand as hygiene factors in explaining the outcome of the customer-servicescape interactions. In contrast, other configurations attract the customers'

continuous attention, leading to approach (motivation factors). This dissimilitude in the effect different stimuli bear on the intended behavior is not new. Herzberg's "two-factor" theory (1964) underpins the investigation of various marketing phenomena (e.g., Pantin-Sohier, 2009; Verma, 2003). Our investigation is the first to bring this well-established theory into the management of the servicescapes, empirically validating past theoretical arguments in the field (Baker, 1986), while opening a new perspective in understanding what stimuli configurations customers attend to and how these affect their psychological reactions and intended behavioral responses.

For instance, certain components of the servicescape that customers are likely to associate with the technical (or "points-of-parity") aspects of a servicescape (e.g., the "functional" configuration in the context of this study) are much more relevant as hygiene factors, particularly under conditions of low information load. Companies will not be rewarded for excelling in these components but will be penalized for failing to meet the "sector's standards." In contrast, configurations that customers perceive as augmenting the value they receive from the service organization ("points-of-differentiation," such as the social and style configurations in our study) play a stronger role as motivators, especially under conditions of high information load, usually found in more complex environments.

5.2 Practical contributions

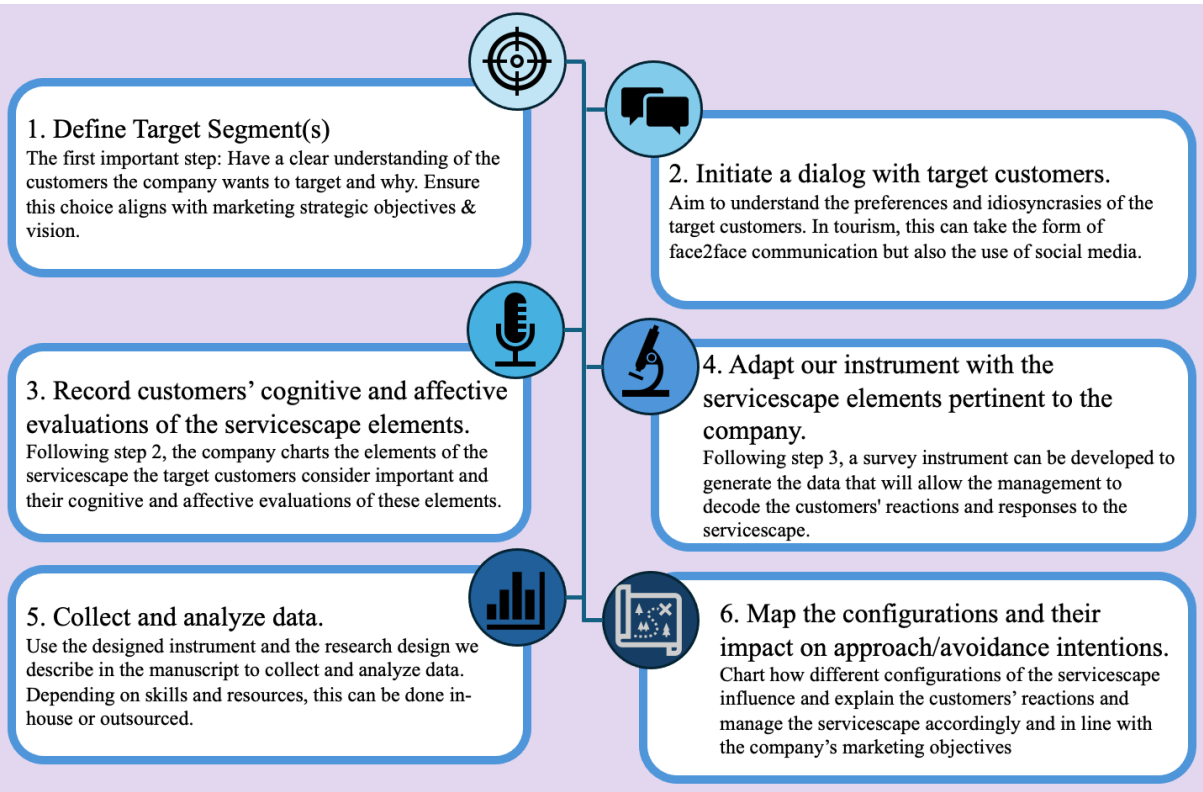
The contribution and implications for practitioners are also important. In managing the servicescape, restaurant managers need to come to terms with the subjectivity governing how customers configure the different servicescape components into configurations (Rosenbaum et al., 2009). It is impossible to generate configurations that stand universally and independently of the context (Edvardsson et al., 2018). The customer's past experiences, learned behaviors, and contextual differences are responsible for this (Jozefowiez, 2012; Pearce, 1994). By implication, attempting to manage any single component, let alone an "element," of the servicescape will probably not deliver the systematic outcomes the management expects. The same truth stands when attempting to increase the effectiveness of managing the servicescape in its entirety or based on pre-conceived (ad-hoc) configurations of the servicescape that may

or may not be relevant for the customers. Rather, the management will need to align the restaurant's service environment with the idiosyncrasies of the customer segment they primarily target.

Our study also offers insights for finetuning the management of the servicescape in relation to the overall load of information the service environment generates. In this regard, we demonstrate the different roles (hygiene vs. motivation) different configurations play in explaining the customers' response, enhancing further the ability to manage the servicescape strategically and from a customer-centric perspective. As such, our findings provide a clear roadmap for the restaurant's management, allowing for the alignment between the restaurant's target customers and the service environment of the restaurant's front-end. Figure 5 summarizes this roadmap and the actions each step in this journey entails to enhance the customer-centricity of the servicescape management effort.

Figure 5 provides a blueprint with the steps managers across tourism and hospitality need to take to apply the approach we developed in this research. These steps will help them build servicescapes that will lead to positive customer experiences, increased satisfaction, and high intentions to revisit.

Figure 5: Blueprint for designing customer-driven servicescapes



6 Limitations and Directions for Future Research

Because customers subjectively interact with the servicescape, different configurations will certainly exist in different contexts or for different companies (e.g., hotels, airports, etc.). The first limitation is, thus, that the configurations we report are not universal. Moreover, due to the small number of respondents from each restaurant (on average 12) we cannot test for any statistically significant differences on the effects of servicescapes on our outcome variables, which would suggest that customers configured servicescapes across our sampled restaurants in different ways, a finding which would be entirely consistent with the prediction of Configural cue theory and R-SOR model. Another limitation of our approach is that our design could not account for the possibility of changes in the composition of servicescape configurations customers' form. For example, habituation (Rankin et al., 2009) is likely to make customers reduce the number of servicescape elements on which they rely to form servicescape configurations as the time in the servicescape is passing by. Finally, our reliance on tourists from native English-speaking countries only may have limited the generalizability of our results.

Notwithstanding, these limitations do not diminish the overall contributions this study offers. Instead, it is opening an exciting path for future investigators. Hence, the first obvious direction for future researchers is to adopt our approach and explore different service contexts across tourism and hospitality as well as with customers with different cultural backgrounds to start building a body of relevant literature for practitioners while providing a better understanding of the various configurations customers from different cultural origins perceive in other contexts.

In doing so, future researchers have a variety of outcomes to consider, including, for instance, time and amount of money spent on the premises, and sharing experiences (through WoM and/or e-WoM (online evaluations)). This study therefore opens multiple interesting paths for future researchers looking at the consequences of successfully managing the servicescape while adopting a customer-centric perspective.

Other related streams of research, such as customer experience management, can also benefit from the results of this study. The customer's servicescape interaction is an important customer experience driver, for which we offer a customer-centric perspective. Therefore, future research in customer

experience management can directly benefit from this approach. We highly recommend and welcome this direction for future researchers from customer experience or other pertinent fields.

Moreover, having realized that the hygiene/motivation theory applies to the way customers interact with the servicescape and the different roles different configurations have in explaining their approach and avoidance behaviors, another exciting path for future research is to establish the level below which customers start to become attentive to the hygiene configurations (low scores) and above which they become attentive to the motivation configurations (high scores). In doing so, future researchers could also address whether this relationship (attention to hygiene and motivation configurations) is linear, as this will have profound implications for practitioners, particularly regarding resource allocation.

Finally, another promising direction for future research is to broaden the investigation of potential moderating effects. Other relevant candidates to test include customer-specific characteristics, such as consumption motives (utilitarian vs. hedonic), the customer's involvement with the service, or the convolution associated with the delivery of the service and the amount of co-production that customers are responsible for. Such studies will allow us to advance our understanding of the interaction between the customer and servicescapes, as well as the outcome of this interaction, in a more holistic manner in the future.

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