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# The role of public space in constructing experience capital: A longitudinal analysis in the hotel context

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#### ABSTRACT

Public space plays a primary role in shaping customers' hospitality experiences. Yet how public space conditions customers' experiential outcomes in accumulating capital for hospitality organizations remains underexplored. Inspired by the theory of psychological ownership, this research presents an in-depth analysis of the impacts of customers' public space experiences on their experiential outcomes using a longitudinal hotel industry dataset merging information from customer surveys, property performance, and surrounding accessibility insights. Findings revealed the positive effects of customers' public space experiences on their overall service experiences, the perceived value of the experience, revisit intentions, and recommendation intentions. Moreover, hotel class, other customers, and surrounding accessibility were empirically verified as moderators conditioning the positive impact of public space. These findings offer valuable implications for theory and practice that are worthy of further exploration.

# 1. Introduction

Public space plays a vital role in energizing civil life in contemporary consumption society (Aubert-Gamet & Cova, 1999; Choi & Mattila, 2016; Goodwin, 1992; Oldenburg, 2001; Sandiford, 2019). However, exactly how public space conditions consumption experiences and generates business value for hospitality organizations remains unclear. Amidst scholarly enthusiasm around social interactions within the theoretical realm of servicescape (Hanks, Line, & Zhang, 2021; Line & Hanks, 2019; Tombs & McColl-Kennedy, 2010), further research is needed to address the impacts of public space on customers' experiences and behavioral intentions or about the role of public space in constructing experience capital for hospitality organizations. In this study, we put forth the concept of experience capital to highlight the merits of positive service experiences. As suggested in Pine and Gilmore's proposition of the experience economy, experience creates economic value. Organizations that offer the best customer experiences possess a competitive advantage in the marketplace (Pine & Gilmore, 2011). In the hospitality industry, positive service experiences have copious benefits for customers and companies alike: they can engender affirmative customer evaluations of an overall service experience, enhance customers' perceived value gained from experience, and boost revisit intentions and recommendation intentions (Kim & So, 2022; Otto & Ritchie, 1996; So & King, 2010; Sørensen & Jensen, 2015). Drawing on this literature, we argue that positive experiences will enable hospitality organizations to extract value and to accumulate business capital, as manifested in positive guest evaluations and responses. This research hence examines the impacts of customers' public space experiences on their overall service experiences, the perceived value of the experience, revisit intentions, and recommendation intentions in accumulating experience capital for hotels.

In a hotel setting, public space comprises functional areas such as the lobby, lounge, and hallways. Public hotel space has generally garnered much less empirical interest than private space (e.g., guest rooms and suites) (Xu & Li, 2016). Public space in hotels only began to gain business attention a few decades ago. Given the revenue-generating potential and community-serving value of hotels' public spaces, the industry has incubated a cluster of contemporary brands and properties known for elevated and superior public space (Gensler, 2018). Moxy Hotel emphasizes vibrant social areas with bold programming to appeal to younger generations of guests. More progressively, Ian Schrager's Public Hotel in New York City reinvented the hotel lobby by installing deep

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Received 31 May 2022; Received in revised form 23 January 2023; Accepted 24 January 2023 Available online 10 February 2023 0261-5177/© 2023 Elsevier Ltd. All rights reserved. sectional seating and expanded communal tables, jointly intended to inspire connections and vibrant conversation. Yet over the past two years, the ongoing pandemic has reshaped hotels' priorities around public and private spaces in terms of space allocation and facility design (Hoteldesigns, 2021; Le & Phi, 2021; Sampson, 2020). The global hospitality industry is now embracing a return to pre-pandemic operations. The social function of experiential consumption is simultaneously witnessing a resurgence in practical and scholarly discussion (Fernandez, 2021; Lu, Lee, Wu, & Li, 2022; Smallwood, 2021). For instance, the trailblazing brand of Courtyard by Marriott is in the midst of a design evolution across North America, expanding the social function of their hotel lobbies with the open-environment Bistro Bar to provide ample space for casual interaction (Marriott International, 2021). This macroenvironment setting calls for scholarly research to ponder the role of public space in constructing experience capital and how this capital accumulation contributes to hotel businesses' bottom line.

We present a longitudinal analysis in the hotel context to advance the understanding of public space and its role in constructing experience capital for hospitality organizations. Through the theoretical lens of psychological ownership (Pierce, Kostova, & Dirks, 2001), this research leverages a longitudinal dataset merging information from customer surveys, property performance, and surrounding accessibility insights to examine guests' experiences in hotels' public spaces. Previous research suggests that public consumption spaces can arouse individuals' psychological ownership (Griffiths & Gilly, 2012; Sandiford, 2019), which may further lead to a variety of responses such as territorial marking and intrusion and heightened value perceptions about the space and associated experiences (Griffiths & Gilly, 2012; Wu, Mattila, & Han, 2014). Extending this line of work, we explore how a hotel's public space affects guests' overall service experiences, the perceived value of the experience, revisit intentions, and recommendation intentions. Along with the perspective of psychological ownership theory, we further examine the moderating roles of hotel class, other customers, and surrounding accessibility in conditioning the impact of public space.

This endeavor advances academic and practical debates on the psychological ownership of space, and space utilization and hotel experience design. The importance of publicness in the servicescape has long been acknowledged in the literature, as early as being mentioned in the third place in literature in sociology (Oldenburg, 2001; Sandiford, 2019). Extending this classic line of literature, our work demonstrates that a hotel's public space can condition guests' overall experiences and subsequent responses. These reactions can positively contribute to hotels' bottom line. This study extends theoretical knowledge of the role of psychological ownership in consumption places (Griffiths & Gilly, 2012; Wu et al., 2014): we demonstrate that hotels' public spaces affect guests' hotel experiences in ways that align with the theory of psychological ownership (Pierce et al., 2001). Psychological ownership can be developed via self-investment, control, and knowledge development (Pierce et al., 2001). Relatedly, our research shows that the impact of a hotel's public space is moderated by hotel class, other customers, and surrounding accessibility. As such, findings highlight the complex process of how various public space vectors (e.g., shared living space, urban space) (Chan & Zhang, 2021) and their inhabitants jointly construct a hotel's experience capital as manifested through customers' experiential outcomes. These experiential outcomes include guests' overall service experiences, the perceived value of the experience, revisit intentions, and recommendation intentions. The research outcomes offer valuable practical implications for hotel managers in redesigning, renovating, and optimizing hotel spaces-specifically public spaces.

The remainder of this paper is structured as follows. First, we review relevant literature on public versus private spaces in hotels, psychological ownership theory, hotel class, other customers, and surrounding accessibility. Next, we detail our data collection and analysis procedures. Then, we present our main findings. This paper closes with an overview of the study's theoretical contributions, practical implications, and directions for future research.

# 2. Theoretical background

# 2.1. Public versus private spaces in hotel service experiences

The hotel servicescape can be separated into public and private spaces (Aubert-Gamet & Cova, 1999). The relative importance of public versus private space in facility design and development has garnered considerable attention in the hotel industry (Kerr Forster Associates, 1993). The hospitality sector initially arose out of the need to provide personal/private space where guests could stay alone or with companions (i.e., guest rooms) (Goodwin, 1992). Privacy and personal room space remain critical in customers' accommodation-related trust, positive/negative experiences, evaluations, and behavioral intentions (Kim, Lee, & Han, 2019; Moon, Yu, Chua, & Han, 2022; Yadav & Roychoudhury, 2019). Just as a tidy room with a pleasant view contributes to a satisfying hotel stay, an unkept room can lead to customer disappointment and negative reviews (Fernandes & Fernandes, 2018; Kuhzady & Ghasemi, 2019; Xu & Li, 2016).

The conceptual distinction between public and private space hinges on the capacity to maintain personal boundaries (Altman, 1975). Whereas people typically hold greater control over their physical and informational privacy in private spaces (Altman, 1975; Goodwin, 1992), the public realm entails social sharing (Francis, 1989). Hotels' public service environment encompasses functional areas (i.e., lobby, lounge, and hallways) and additional service areas as applicable (e.g., business center, event spaces, fitness center, diverse food and beverage outlets, spa). These public spaces contribute essential elements of the hotel experience. More specifically, these spaces offer guests social interactional value, which is an indispensable dimension of the social servicescape (Hanks et al., 2021; Li, 2021; Line & Hanks, 2019). In such spaces, other customers' presence can influence one's enjoyment of the service experience (Choi & Mattila, 2016; Line & Hanks, 2019; Tombs & McColl-Kennedy, 2010). Skillfully managing these areas can create a pleasant service ambiance and positive outcomes - favorable customer evaluations (Lee & Chuang, 2021), high engagement (Li, 2021), unique experiences (Mishra & Gupta, 2019), and loyalty (Hanks & Line, 2018).

# 2.2. Public space and psychological ownership theory

Social presence notwithstanding, public spaces can stimulate one's sense of control and psychological ownership and thus inform the service experience. Psychological ownership theory (Pierce et al., 2001) posits that individuals can feel ownership toward a variety of targets (e. g., objects, places). Possession is part of human nature (Sartre, 1969). People also have an innate need to "[have] a place" (Pierce et al., 2001). This need can trigger a keen sense of ownership in public service settings where customers practice and endure territoriality (Griffiths & Gilly, 2012; Wu et al., 2014). Scholars have suggested that customers may intentionally mark public spaces to claim spatial ownership (Griffiths & Gilly, 2012). Research has also described place attachment in public hospitality environments; that is, this setting provides comfort and security for customers to derive a sense of ownership from temporary spatial control (Sandiford, 2019).

By enhancing guests' sense of psychological ownership, experiences in public spaces could improve their experience perceptions, value perceptions, and engagement intentions. Psychological ownership can inspire affirmative customer evaluations of a product or service (Beggan, 1992; Fuchs, Prandelli, & Schreier, 2010; Nuttin, 1987; Peck & Shu, 2009). When customers spend more time in a hotel's public areas, they become familiar with the establishment's basic features and what differentiates this place from other hotels' public areas. People normally magnify their favorable evaluations of a target place (Pierce, Kostova, & Dirks, 2003). Psychological ownership theory also asserts that having a sense of ownership over a target can cause a person to see that object as an extension of the self and in turn attribute higher value to it (Belk, 1988; Pierce et al., 2001). For example, tourists often attach higher perceived value to souvenirs over which they hold stronger feelings of psychological ownership (Deng, Lu, Lin, & Chen, 2021).

More importantly, considering a public service environment as one's own place can foster a sense of attachment, thereby encouraging revisitation (Neuvonen, Pouta, & Sievänen, 2010; Prayag & Ryan, 2012) and positive word of mouth (Line, Hanks, & Kim, 2018). Consumers who develop psychological ownership are willing to support a company through active purchases; doing so can feel analogous to personal success (Chang, Chiang, & Han, 2012). Guests who perceive a hotel's public areas as "theirs" (i.e., as part of their extended self) (Fuchs et al., 2010) have a sense of responsibility to promote the hotel. These customers are inclined to go beyond repeat product/service transactions, such as by providing favorable recommendations and convincing others to buy products (Li, Qu, & Wei, 2021). In light of the possibility that public space can cultivate psychological ownership and heighten customers' responses, coupled with literature documenting the positive impacts of public space in hotel experiences, we propose the following.

**H1**. Guests' public space experiences will positively affect their (a) overall hotel experiences, (b) perceived value of the hotel experience, (c) revisit intentions, and (d) recommendation intentions.

Notably, the impact of public space may be contextually determined by the extent to which customers develop a sense of psychological ownership toward the hotel. Psychological ownership theory suggests three primary routes to establishing such ownership: investing oneself in the target, controlling the target, and coming to intimately know the target (Pierce et al., 2001). First of all, psychological ownership can follow from investing oneself in a target. Devoting attention, time, and resources to a target causes people to develop more self-relevance and to express stronger psychological ownership. As an example, the longer time and more financial resources consumers commit to a resort stay, the more likely they will treat the place as their own. Secondly, psychological ownership may come from individuals exercising control over the target space. Control is a pillar of ownership (Pierce et al., 2001) and is a primary dimension of public space quality (Francis, 1989). In hospitality settings, customers can claim control over public spaces by marking such as using personal belongings to occupy extra space in a shared seating area (Griffiths & Gilly, 2012; Wu et al., 2014). Lastly, coming to intimately know an object or space is another crucial way in which people construct psychological ownership. Throughout the learning process, people acquire information about the target and gradually build a relationship with it (Dittmar, 1992; Pierce et al., 2001). For instance, as individuals get to know more about a historic hotel and its stories, the more likely they will treasure the place and take care of the place as their own.

Drawing on the above insights from the psychological ownership theory, we theorize that the impact of public space in the hotel experience (as driven by psychological ownership) shall be contingent on the affordance of a consumption context that provides adequate opportunities to establish psychological ownership over the hotel's public space. The three constructs of hotel class, other customers, and/or surrounding accessibility are further examined in this research as they each reflect customers' practices of self-investment, control, and knowledge development in the process of developing psychological ownership over the hotel space. Accordingly, hotel class, other customers, and surrounding accessibility are presumed to moderate the impact of a public space experience on guests' overall hotel experiences, perceived value of the hotel experience, revisit intentions, and recommendation intentions.

# 2.3. Hotel class

Customers' financial investment in a hotel stay can vary considerably based on hotel class. Hotels can be classified based on average room rates. According to the benchmark system of Smith Travel Research (STR), hotels are labeled luxury, upper upscale, upscale, upper midscale, midscale, or economy (STR, 2022). Different hotel groups classify their brands or properties following a similar price-level-dominant approach. For instance, Marriott International groups its brands into segments such as luxury, premium, select, and etc. Hotel class has been extensively investigated in hospitality and tourism (Oh, 2000). The construct influences customers' value perceptions, satisfaction, and behavioral intentions (Oh, 2000; Liu, Wong, Tseng, Chang, & Phau, 2017; von Wallpach, Hemetsberger, Thomsen, & Belk, 2020; Yang, Zhang, & Mattila, 2016).

The current research focuses on the function of hotel class in conditioning the self-investment route via which people develop psychological ownership over hotel space-particularly its public space. The price-level classification (STR, 2022) suggests that hotel class reflects guests' degree of investment in the hotel experience (Gilovich, Kumar, & Jampol, 2015; von Wallpach et al., 2020). Higher-class hotel guests invest more financial resources in the consumption process and are likely to display greater entitlement to the hotel space (especially its public space) per psychological ownership theory (Pierce et al., 2001). An elevated sense of psychological ownership will augment the impact of the hotel's public space on customers' evaluations of the overall hotel experience, perceived value, revisit intentions, and recommendation intentions. Put simply, the positive effects of public space on guests' overall hotel experiences and accompanying value perceptions and behavioral responses should be stronger for high- (vs. low-) class hotels. Stated formally.

**H2.** The positive impacts of the public space experience on guests' (a) overall hotel experiences, (b) perceived value of the hotel experience, (c) revisit intentions, and (d) recommendation intentions will be stronger for upper- (vs. lower-) class hotels.

#### 2.4. Other customers

Individuals' control over public space is very much conditioned by the presence of others. The presence of other customers is a pivotal component of the service environment (Choi & Mattila, 2016; Line & Hanks, 2019; Liu, Wu, & Li, 2022; Tombs & McColl-Kennedy, 2010). Others' behavior can both enliven and detract from a focal customer's service experience. Social facilitation theory and relevant studies indicate that other customers can enhance one's drive state or level of arousal, augmenting the positive impact of the external environment (Tombs & McColl-Kennedy, 2010; Zajonc, 1965). The presence of other customers can also amplify one's sense of belonging and homophily to elevate the customer experience in a social servicescape (Hanks, Line, & Yang, 2017; Line, Runyan, Costen, Frash, & Antun, 2012). On the contrary, other customers' misbehavior can compromise customers' service experiences (Huang, Lin, & Wen, 2010).

In this paper, we emphasize how the presence of other customers influences one's perceived control over hotels' public spaces and hence shapes the impact of such space per psychological ownership theory (Pierce et al., 2001). A large number of other customers can lead to crowding, contribute to environmental noise and diminish sense of privacy, thereby attenuating perceived control (Hou, Zhang, & Li, 2021; Hui & Bateson, 1991; Muraven & Baumeister, 2000; Schmidt & Keating, 1979). The reduced sense of control resulting from a large number of other customers can inhibit the agency via which customers develop psychological ownership over the service environment-and, in particular, the public service space (Pierce et al., 2001). In essence, crowding in a hotel's public areas reduces guests' perceived psychological ownership of the space and tempers favorable responses. Kirk, McSherry, and Swain (2015) found customers to express stronger psychological ownership in an executive lounge to which only a small number of guests were supposed to have access (vs. a restaurant where anyone could enter). The positive impact of public space on customers' overall hotel experiences and the related value perceptions and behavioral responses will be undermined when more (vs. fewer) customers share the space. The following hypothesis is thus put forth.

**H3.** The positive impacts of the public space experience on guests' (a) overall hotel experiences, (b) perceived value of the hotel experience, (c) revisit intentions, and (d) recommendation intentions will be stronger when there are fewer (vs. more) other customers present.

# 2.5. Surrounding accessibility

Finally, the surrounding environment can influence guests to spend more or less time within the property to learn more about the hotel. Location, as a prime consideration in hotel development (O'Neill & Mattila, 2006; Yang, Luo, & Law, 2014), can heavily affect a hotel's operating income, market demand, and customer experience (Li & Du, 2018; Lockyer, 2005; O'Neill & Mattila, 2006; Sim, Mak, & Jones, 2006; Yang et al., 2014). For many people, staying in a central location can enhance the travel experience: a highly accessible surrounding offers visitors opportunities for neighborhood immersion. They can also learn more about the destination. Conversely, hotels in remote locations typically have dull surroundings with few attractions. In such circumstances, guests usually prefer to stay in the hotel and spend more time in its servicescape. Many resort hotels strategically choose faraway locations to maximize customers' time and money spent on site.

Although an accessible surrounding invites customers to step outside the hotel, it also lowers the amount of time and attention customers may otherwise spend on site to develop intimate knowledge of the hotel. Through the lens of psychological ownership, surrounding accessibility may distract customers from developing intimate knowledge of the hotel and prevent them from exhibiting psychological ownership over its space (Pierce et al., 2001). High surrounding accessibility should therefore lessen the positive impacts of public space on customers' overall hotel experiences, perceived value of the hotel experience, revisit intentions, and recommendation intentions. As a result, we propose that.

**H4.** The positive impacts of the public space experience on guests' (a) overall hotel experiences, (b) perceived value of the hotel experience, (c) revisit intentions, and (d) recommendation intentions will be stronger for hotels in less (vs. more) accessible surroundings.

Our proposed hypotheses are illustrated in Fig. 1.

# 3. Empirical analyses

# 3.1. Data

Our research hypotheses were tested using information from the following datasets: (1) hotel guests' experience survey outcomes, provided by a hotel group; (2) hotel class and chain scales from STR (to test  $H_2$ ); (3) hotel property level occupancy rate, provided by the same hotel group (to test  $H_3$ ); and (4) the National Walkability Index (NWI), estimated by the U.S. Environmental Protection Agency (EPA) (to test  $H_4$ ).

The first dataset was collected from one of the world's leading hotel brand operators that manages a range of brands from the upper midscale to luxury segments. With long standing service prestige and leadership in the hotel industry, this hotel group is worldly known as one of the largest hotel chains in the world. The diverse brand portfolio of this hotel group offers a prolific empirical ground for us to examine the research phenomenon. Moreover, this dataset included 43,078 observations from 700 hotel properties across 9 brands between January 2008 and June 2013. The properties were in 343 cities across 44 U.S. states. The hotel group conducted customer surveys via email to evaluate hotel performance using a random sample of all customers who stayed at one of its hotel properties. Survey responses were aggregated into monthly average scores and matched to each property. The longitudinal data integrated in our empirical analyses consisted of the average scores on specific survey questions regarding hotel guests' experiences; the year and month of the hotel stay; and hotel characteristics, such as the hotel name and street address, hotel brand, number of rooms, hotel age (measured as the number of years in operation), location/market type (e.g., downtown, suburban, airport), and service type (e.g., full-service, limited-service).

We included four outcome variables in our analyses to measure hotel guests' experiences: the overall hotel experiences (*Overall Experience*), perceived value of the experience (*Value*), intentions to revisit the property (*Revisit*), and intentions to recommend the hotel to others (*Recommend*). *Overall Experience* was an unconditional evaluation of a guest's overall hotel stay; *Value* was a conditional measure relative to the price paid. Each was assessed on a 10-point scale (1 = lowest rating, 10 = highest rating). *Revisit* and *Recommend*, two behavioral intentions commonly derived from guests' satisfaction with hotel stays, were rated on a 6-point scale (1 = not at all, 6 = definitely).

In addition to the above four hotel experience outcomes, the public space experience index and the private space experience index were calculated to measure guests' experiences with hotels' public and private spaces. These indices were estimated based on respondents' average scores on specific survey questions (Table 1). Individual-level data were aggregated using the date of stay indicated in surveys to calculate average monthly indices. The public space experience index was taken as the independent variable of interest; the private space experience index served as a control variable.

The second dataset was a hotel class/chain scale dataset from STR. Each hotel in our sample was matched to the STR dataset to assign the STR class number. Consistent with STR definitions, the class variable = 1 if a hotel was in the luxury scale segment, class = 2 for upper upscale, class = 3 for upscale, class = 4 for upper midscale, class = 5 for midscale, and class = 6 for economy. In summary, the smaller the class variable, the higher the hotel chain segment (i.e., the more luxurious the hotel). We used hotel class as a moderator to test Hypothesis 2.

We used the occupancy rate as a proxy for other customers who potentially occupied the hotel's public space at the same time as the focal guest. Occupancy rate information, also provided by the hotel group, was aggregated into a monthly index and matched to each property. Occupancy rate served as a moderator to test Hypothesis 3.

Lastly, the dataset of the National Walkability Index (NWI) was used to inform hotel surrounding accessibility to test Hypothesis 4. Surrounding accessibility can be assessed in many ways, with walkability (i. e., how easily a hotel guest can walk through surrounding neighborhoods) being a prime metric. In particular, we used the National Walkability Index (NWI) as a proxy for surrounding accessibility. Developed and maintained by the U.S. Environmental Protection Agency (EPA), NWI data and its construction methodology is publicly available. The dataset covers every census block group<sup>1</sup> in the country, providing a basis for comparing walkability from community to community. The NWI is based on elements of the built environment that affect people's likelihood of using walking as a mode of transportation: street intersection density, proximity to transit stops, employment and household mix, and diversity of land use (Thomas & Reyes, 2021). Communities' NWI ratings range from 1 (the least walkability) to 20 (the most walkability). Communities are labeled as follows: least walkable (from 1 to 5.75; e.g., rural areas); below average walkable (5.76-10.5; e. g., suburban); above-average walkable (10.51-15.25; e.g., historic main street); and most walkable (15.26-20; e.g., city center). We matched the NWI dataset to hotel experience survey data using hotel location. The walkability index for each hotel property was defined as the NWI for the community where the hotel was located. Only 23,441 NWIs were matched because data were missing for some hotel properties in non-census-covered areas. Table 2 provides an overview of the combined dataset used in this study.

<sup>&</sup>lt;sup>1</sup> A census block group is a unit of census geography that is smaller than a census tract and larger than a census block. The size of a block group varies by population density. In a dense urban area, a block group can be as small as one or two acres. In rural areas, block groups can encompass thousands of acres.

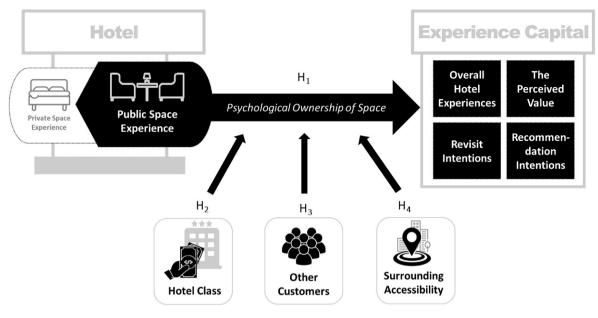


Fig. 1. Conceptual framework.

Table 1 Public sp

Public space experience index and private space experience index.

Index Name	Survey Items
Public Space Experience	
	Overall experience with lobby environment
	Overall experience with club lounge
	Overall experience with hotel amenities
	Overall experience with exercise equipment and facilities
	Lobby area inviting
	Lobby area completely clean
	Lobby area comfortable for working
	Lobby area comfortable for relaxing
Private Space Experience	
	Overall experience with guest room
	Overall experience with bathroom
	Guest room comfortable for relaxing
	Guest room smells clean and fresh

Hotel properties in our sample spanned four classes from luxury to upper midscale with occupancy rate levels ranging from 0.02 to 0.99 (M = 0.69, SD = 0.14) and walkability indices between 1.67 and 20 (M =13.06, SD = 3.84). These hotels included recently opened properties (i. e., those in operation for less than a year) to ancient hotels open for 106 years. Hotel sizes varied dramatically, from small properties including 78 rooms to mega-hotels with 2882 rooms. Scores on the overall hotel experiences ranged from 4.58 to 10 (M = 8.41, SD = 0.44). Perceived value trended slightly lower, ranging from 4.19 to 9.8 (M = 8.11, SD =0.48). Behavioral intentions fell into similar ranges: revisit intentions ranged from 4.75 to 10 (M = 8.12, SD = 0.50) and recommendation intentions was between 4.25 and 10 (M = 8.25, SD = 0.52). Average scores on the public space experience and the private space experience were similar, roughly 8.32-8.41. However, the range and standard deviation of public space experience is larger than that of private space experience.

#### 3.2. Model specification

Several regressions were run to test the four hypotheses using STATA. To assess the impact of public space experience on the overall hotel experience (H1), our regressions adhered to the following model: *Hotel Experience Outcome*<sup>*j*</sup><sub>*i*,*t*</sub> =  $\alpha + \beta Public Space Experience<sub>$ *i*,*t* $</sub> + <math>\gamma X_{i,t} + \eta_t$ 



Note: *i* indicates a hotel property (i = 1, 2, ..., 700); *t* indicates the month (t = 1, 2, ..., 66) in the studied period from January 2008 to June 2013; *j* indicates the hotel experience outcome (j = 1 for overall experience, 2 for perceived value, 3 for revisit intention, and 4 for recommendation intention).

In this model,  $\beta$  reflects the impact of the public space experience index on the overall hotel experience. A set of control variables were incorporated into *X* with a vector of coefficients  $\gamma$ . Control variables were the private space experience, hotel location type, service type, logarithm of the number of years the hotel was operating, logarithm of the total number of rooms, brand and city fixed effects.  $\eta_t$  represents the year–month fixed effects. The error term  $\varepsilon_{i,t}$  is assumed to follow a normal distribution with a zero mean and a definite variance. Similar regression models were defined and run to test other dependent variables (perceived value, revisit intention, and recommendation intention). Findings for these regression models are displayed in Table 3.

As indicated in Fig. 1, hotel class, other customers (i.e., occupancy rate), and surrounding walkability served as moderators that could enhance or reduce the impacts of the public space experience on the overall hotel experience, perceived value, and behavioral intentions (revisit intentions and recommendation intentions). We conducted the following regressions:

Hotel Experience Outcome<sup>j</sup><sub>i,t</sub> =  $\alpha + \beta_m Public$  Space Experience<sub>i,t</sub>

- \* Moderator<sup>k</sup> +  $\beta$ Public Space Experience<sub>i,t</sub> + m Moderator<sup>k</sup> +  $\gamma X_{i,t}$  +  $\eta_t$
- $+ \varepsilon_{i,t}$

where *Moderator*<sup>k</sup> (k = 1, 2, 3) represent three moderators: class, occupancy rate, and walkability index.

The moderation analyses enabled us to clarify the moderating effects of these three factors (positive  $\beta$  vs. negative  $\beta$ ). Statistical significance (i.e., at the 1%, 5%, or 10% level) and economic importance were then estimated and analyzed. The results of moderation analyses are reported in Tables 4–6.

# Table 2

Summary statistics.

Variable	Number of Observations	Mean (M)	Standard Deviation (SD)	Minimum	Maximum
Experience Outcomes					
Overall Experience	43,078	8.414	0.435	4.579	10
Value	43,078	8.112	0.482	4.189	9.833
Revisit	43,078	8.120	0.502	4.750	10
Recommend	43,078	8.252	0.521	4.250	10
Public Space Experience	43,078	8.318	0.650	1.872	10
Private Space Experience	43,078	8.405	0.440	5.382	10
Years in Operation	43,078	27.058	8.616	0	106
Number of Rooms	43,078	271.030	267.850	78	2882
Chain Scale Segment					
Luxury	43,078	0.016	0.124	0	1
Upper Upscale	43,078	0.270	0.444	0	1
Upscale	43,078	0.662	0.473	0	1
Upper Midscale	43,078	0.052	0.222	0	1
Service Type					
Full service	43,078	0.283	0.451	0	1
Limited service	43,078	0.004	0.065	0	1
Selected service	43,078	0.466	0.499	0	1
Extended stay	43,078	0.243	0.429	0	1
Conference hotel	43,078	0.003	0.053	0	1
Location Type					
Airport	43,078	0.152	0.359	0	1
Downtown	43,078	0.158	0.365	0	1
Expressway	43,078	0.041	0.198	0	1
Metro	43,078	0.162	0.369	0	1
Resort	43,078	0.029	0.168	0	1
Suburban	43,078	0.457	0.498	0	1
Others	43,078	0.001	0.032	0	1
Year					
2008	43,078	0.180	0.385	0	1
2009	43,078	0.183	0.387	0	1
2010	43,078	0.184	0.388	0	1
2011	43,078	0.184	0.388	0	1
2012	43,078	0.180	0.384	0	1
2013	43,078	0.088	0.283	0	1
Chain Brand					
Brand 1	43,078	0.422	0.494	0	1
Brand 2	43,078	0.004	0.065	0	1
Brand 3	43,078	0.016	0.124	0	1
Brand 4	43,078	0.211	0.408	0	1
Brand 5	43,078	0.056	0.230	0	1
Brand 6	43,078	0.195	0.397	0	1
Brand 7	43,078	0.044	0.206	0	1
Brand 8	43,078	0.048	0.213	0	1
Brand 9	43,078	0.003	0.053	0	1
Moderators					
Hotel Class	43,078	2.739	0.578	1	4
Occupancy Rate	43,078	0.692	0.135	0.015	0.991
Walkability Index	23,441	13.055	3.839	1.667	20

# 4. Findings

# 4.1. Hypothesis 1: impact of public space experience

Table 3 presents the regression results for the public space experience and four dependent variables (overall guest experience, perceived value, revisit intention, and recommendation intention). All four regression models resulted in an adequate R<sup>2</sup> value (greater than 70%), reflecting these models' reliability in explaining the dependent variables. The public space experience was found to have significant positive effects on the overall guest experience ( $\beta = 0.16$ ; p < 0.01), perceived value ( $\beta = 0.16$ ; p < 0.01), revisit intentions ( $\beta = 0.12$ ; p < 0.01), and recommendation intentions ( $\beta = 0.14$ ; p < 0.01). Hypothesis 1 was accordingly supported; that is, guests' use and enjoyment of public space improved their overall hotel experiences, perceived value of the hotel experience, revisit intentions, and recommendation intentions.

# 4.2. Hypothesis 2: moderating role of hotel class

Hotel class was included in the regression models as a moderator

with outcomes listed in Table 4. Hotel class significantly moderated the impact of the public space experience on the overall hotel experience ( $\beta m = -0.06$ ; p < 0.01), perceived value ( $\beta m = -0.06$ ; p < 0.01), revisit intentions ( $\beta m = -0.03$ ; p < 0.01), and recommendation intentions ( $\beta m = -0.05$ ; p < 0.01). These results indicate that the positive impacts of public space experience on various experience outcomes was stronger in upper-class hotels than in lower-class hotels. As such, Hypothesis 2 was supported.

# 4.3. Hypothesis 3: moderating role of other customers

Next, hotel occupancy was included in the regression models as a moderator; results appear in Table 5. The lower the number of other customers (as indicated by lower hotel occupancy), the stronger the effects of the public space experience on guests' overall hotel experiences ( $\beta m = -0.23$ ; p < 0.01), perceived value ( $\beta m = -0.21$ ; p < 0.01), revisit intentions ( $\beta m = -0.09$ ; p < 0.01), and recommendation intentions ( $\beta m = -0.13$ ; p < 0.01). When a high number of other customers shared the public space in hotels, guests' public space experiences had a lesser impact on guests' experiences, perceived value,

# Table 3

Impacts of public space on guests' experiences and behavioral intentions.

	(1)	(2)	(3)	(4)
Independent Variables	Overall	Value	Revisit	Recommend
Public space experience	0.163***	0.158***	0.120***	0.140***
	(0.002)	(0.002)	(0.003)	(0.002)
Control variables				
Private space experience	0.713***	0.731***	0.772***	0.839***
	(0.003)	(0.004)	(0.004)	(0.004)
Years in operation	0.057***	0.100***	0.073***	0.033***
	(0.005)	(0.006)	(0.006)	(0.006)
Number of rooms	0.007	-0.014**	0.024***	0.046***
	(0.005)	(0.006)	(0.006)	(0.006)
Location type	YES	YES	YES	YES
Service type	YES	YES	YES	YES
Brand	YES	YES	YES	YES
Year & month	YES	YES	YES	YES
City	YES	YES	YES	YES
Constant	0.961***	0.354***	0.418***	-0.092
	(0.077)	(0.097)	(0.100)	(0.095)
Observations	43,078	43,078	43,078	43,078
R-squared	0.784	0.729	0.733	0.776

Robust standard errors in parentheses.

\*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.1.

# Table 4

Moderating effects of hotel class (i.e., Class).

	(1)	(2)	(3)	(4)
Independent Variables	Overall	Value	Revisit	Recommend
Public space	-0.060***	-0.056***	-0.030***	-0.051***
experience*Class	(0.003)	(0.004)	(0.004)	(0.004)
Public space experience	0.342***	0.324***	0.211***	0.293***
	(0.010)	(0.012)	(0.013)	(0.012)
Class	0.482***	0.601***	0.116***	0.299***
	(0.026)	(0.033)	(0.034)	(0.032)
Control variablesRobust st	andard errors i	n parentheses		
Private space	0.712***	0.728***	0.771***	0.837***
experience	(0.003)	(0.004)	(0.004)	(0.004)
Years in operation	0.065***	0.107***	0.077***	0.039***
	(0.005)	(0.006)	(0.006)	(0.006)
Number of rooms	0.004	-0.017***	0.022***	0.043***
	(0.005)	(0.006)	(0.006)	(0.006)
Location type	YES	YES	YES	YES
Service type	YES	YES	YES	YES
Brand	YES	YES	YES	YES
Year & month	YES	YES	YES	YES
City	YES	YES	YES	YES
Constant	-0.514***	-1.270***	-0.044	-1.079***
	(0.110)	(0.137)	(0.142)	(0.134)
Observations	43,078	43,078	43,078	43,078
R-squared	0.786	0.730	0.733	0.777

Robust standard errors in parentheses.

\*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.1.

and behavioral outcomes. Hypothesis 3 was hence supported.

# 4.4. Hypothesis 4: moderating role of surrounding accessibility

Finally, we test the moderating effect of surrounding accessibility using walkability (i.e., the NWI walkability index) as a proxy (see Table 6).

Results lent support to Hypothesis 4, demonstrating that effects of the public space experience on the overall hotel experience were stronger for hotels in less accessible (i.e., less walkable) surroundings ( $\beta m = -0.001$ ; p < 0.01). Surrounding accessibility (measured by the walkability index) also played a significant role in moderating the positive impact of public space experience on guests' perceived value ( $\beta m = -0.002$ ; p < 0.01), revisit intentions ( $\beta m = -0.002$ ; p < 0.01), and recommendation intentions ( $\beta m = -0.003$ ; p < 0.01). When faced with an abundance of options to explore outside the hotel (i.e., the hotel's

surroundings are readily accessible as evidenced by a high walkability index), guests might spend less time in the hotel's public area. In line with our theorization derived from the psychological ownership theory, the public space experience at hotels in more accessible areas (i.e., areas of higher walkability) was of relatively lower importance compared with hotels in less accessible areas (i.e., areas of low walkability). Hypothesis 4 was thus supported as well.

# 5. General discussion

# 5.1. Theoretical contributions

Based on a longitudinal dataset fusing insights related to customer surveys, operational performance, and surrounding environment, we comprehensively analyzed the role of public space in constructing a hotel's experience capital. Positive service experiences are key means of business value extraction and capital growth for hospitality organizations (Kotler, Bowen, & Baloglu, 2021). Positive experiences offer myriad benefits: they can enable favorable customer evaluations, enhance guests' perceived value gained from the experience, boost revisit intentions, and foster recommendation intentions (Kim & So, 2022; Otto & Ritchie, 1996; So & King, 2010; Sørensen & Jensen, 2015). We propose experience capital as an anchoring perspective to examine the impact of public space in hotels. Our research revolved around how customers' public space experiences influence their overall hotel experiences, perceived value of the hotel experience, revisit intentions, and recommendation intentions.

Social/public spaces are an indispensable part of consumer life (Aubert-Gamet & Cova, 1999; Choi & Mattila, 2016; Goodwin, 1992; Oldenburg, 2001). Service organizations such as cafés, hotels, and restaurants provide social/public spaces where people can convene and converse beyond the typical territories of home and work (Griffiths & Gilly, 2012; Oldenburg, 2001; Sandiford, 2019; Wu et al., 2014). Such experiences contribute to personal wellness and community cohesiveness (Oldenburg, 2001). Previous research on customer-to-customer interactions identifies the positive impact of social interactions in the public servicescape (Hanks et al., 2021; Line & Hanks, 2019; Tombs & McColl-Kennedy, 2010). Extending this literature, our research examined the overall guest experiences in the public servicescape and their downstream impact on customers' overall hotel experiences, perceived value of the hotel experience, revisit intentions, and recommendation intentions. During the peak of the pandemic, guests' experiences in the hotels' private space became central to influence word of mouth and visit/revisit intentions (Hu, Teichert, Deng, Liu, & Zhou, 2021; Le & Phi, 2021; Song, Liu, Guo, Yang, & Jin, 2022). As the world gradually moves beyond the throes of the COVID-19 pandemic, the regained right to socialize in unconstrained physical space is more uplifting than ever. Against this background, our research echoes other literature celebrating the meaning of publicness and social life in today's consumption society (Oldenburg, 2001; Sandiford, 2019). We demonstrate that hotels' public spaces contribute to these establishments' bottom line. Indeed, public space experiences can enhance guests' overall hotel experiences, perceived value of the hotel experience, revisit intentions, and recommendation intentions. Our work also extends our understanding of servicescape, hotel design and space allocation (Aubert--Gamet & Cova, 1999; Kim et al., 2019; Moon et al., 2022; Yadav & Roychoudhury, 2019): findings underline the power of public spaces in hospitality management. Our results further illuminate how a hotel's public space can elevate guests' experiential outcomes while eliciting business-related gains.

More importantly, we have described how and why a hotel's public space improves customers' experiential outcomes to enrich the hotel's experience capital. This investigation extends prior theoretical efforts examining the role of psychological ownership in consumption places (Griffiths & Gilly, 2012; Wu et al., 2014). In particular, we discovered that hotels' public spaces can color customers' hotel experiences in ways

#### Table 5

Moderating effects of other customers (i.e., Occupancy).

	(1)	(2)	(3)	(4)
Independent Variables	Overall	Value	Revisit	Recommend
Public space experience*Occupancy	-0.233***	-0.211***	-0.087***	-0.128***
	(0.010)	(0.013)	(0.013)	(0.012)
Public space experience	0.308***	0.294***	0.176***	0.220***
	(0.007)	(0.008)	(0.009)	(0.008)
Occupancy	2.035***	1.489***	0.606***	1.088***
	(0.083)	(0.104)	(0.108)	(0.103)
Control variables				
Private space experience	0.720***	0.732***	0.773***	0.843***
	(0.003)	(0.004)	(0.004)	(0.004)
Years in operation	0.054***	0.097***	0.072***	0.031***
	(0.005)	(0.006)	(0.006)	(0.006)
Number of rooms	0.010**	$-0.013^{**}$	0.024***	0.047***
	(0.005)	(0.006)	(0.006)	(0.006)
Location type	YES	YES	YES	YES
Service type	YES	YES	YES	YES
Brand	YES	YES	YES	YES
Year & month	YES	YES	YES	YES
City	YES	YES	YES	YES
Constant	-0.353***	-0.657***	0.007	-0.799***
	(0.094)	(0.117)	(0.122)	(0.116)
Observations	43,078	43,078	43,078	43,078
R-squared	0.787	0.734	0.733	0.777

Robust standard errors in parentheses.

\*\*\**p* < 0.01, \*\**p* < 0.05, \**p* < 0.1.

#### Table 6

Moderating effects of	f surrounding	accessibility (	(i.e., W	/alkability).
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	(1)	(2)	(3)	(4)
Independent Variables	Overall	Value	Revisit	Recommend
Public space	-0.001**	-0.002***	-0.002**	-0.003***
experience*Walkability	(0.001)	(0.001)	(0.001)	(0.001)
Public space experience	0.174***	0.193***	0.140***	0.160***
	(0.008)	(0.011)	(0.012)	(0.011)
Walkability	0.013**	0.015**	0.012*	0.019***
	(0.005)	(0.007)	(0.007)	(0.006)
Control variablesRobust stan	dard errors in	parentheses		
Private space experience	0.717***	0.739***	0.793***	0.860***
	(0.004)	(0.005)	(0.006)	(0.005)
Years in operation	0.079***	0.128***	0.051***	0.033***
	(0.005)	(0.007)	(0.007)	(0.006)
Number of rooms	0.010**	-0.013**	-0.003	0.028***
	(0.005)	(0.006)	(0.007)	(0.006)
Location type	YES	YES	YES	YES
Service type	YES	YES	YES	YES
Brand	YES	YES	YES	YES
Year & month	YES	YES	YES	YES
City	NO	NO	NO	NO
Constant	0.858***	-0.053	-0.234*	-0.175
	(0.093)	(0.123)	(0.129)	(0.117)
Observations	23,441	23,441	23,441	23,441
R-squared	0.758	0.668	0.653	0.733

Robust standard errors in parentheses.

\*\*\*p < 0.01, \*\*p < 0.05, \*p < 0.1.

that align with the theory of psychological ownership (Pierce et al., 2001). This theory postulates that psychological ownership is cultivated through self-investment, control, and knowledge development (Pierce et al., 2001). In line with these propositions, our research shows that the impact of a hotel's public space on customers is contingent on the hotel's contextual affordance in providing guests with resources and opportunities to develop psychological ownership over the space—especially public space. In brief, higher- (vs. lower-) class hotels demand a higher level of experiential investment; a lower (vs. higher) presence of other customers grants hotel guests richer opportunities to establish a sense of control over the consumption place; and less (vs. more) accessible surrounding provides guests a dedicated spatiotemporal zone for prolonged

onsite engagement to develop an intimate knowledge of the hotel. These consumption conditions promote customers' psychological ownership over the hotel's public space and augment the impacts of public space on guests' overall service experiences, the perceived value of the experience, revisit intentions, and recommendation intentions. Our findings also highlight factors moderating the positive impact of public space in hotels. Altogether, these discoveries identify psychological ownership as an important theoretical perspective that can help explain why hotels' public spaces positively influence customers' experiences. The more a consumption context affords customers chances to exert psychological ownership over the space, the more likely it is that the space will productively inform their experiences.

The identified processes of cross-level individual-environment interactions in shaping hospitality service experiences also contribute to scholarly discourse on urban space and social culture (Chan & Zhang, 2021; Warf & Arias, 2009). Our findings underscore the complexities in how public space vectors (e.g., shared living space, urban space) (Chan & Zhang, 2021) and their inhabitants jointly construct a hotel's experience capital, as indicated by guests' evaluations and responses (i.e., overall service experiences, perceived value of the experience, revisit intentions, and recommendation intentions). Our novel exploration further captures how the role of micro-level space in one's experiences is conditioned by larger urban spaces. More precisely, we investigated how hotels' surrounding accessibility shapes the roles of hotels' public spaces in customers' experiences. These findings unveil an intriguing research line for scholars interested in service experiences and design. Relevant studies can be extended to the interactions among spatial vectors-especially vectors of different scales-in guiding personal, group, and community experiences.

#### 5.2. Managerial implications

This research presents critical insights to aid hotel managers around the globe in managing guest experiences and maintaining hotels' public spaces. As the tourism and hospitality industry gradually recovers to the pre-pandemic normal, an increasing number of resorts and hotels are developing competitive entertainment offerings in hotels' public spaces to entice guests (The Wall Street Journal, 2022). Echoing this contemporary trend in practice, our findings highlight the value of hotels' public space and the respective guest experience. Our results suggest that positive guest experiences in hotels' public spaces can generate positive guest perceptions and spur customers' behavioral intentions. Hotel managers thus should dedicate efforts to effectively maintaining the hotels' public spaces and ensuring guests having a pleasant experience in such areas. As hotels' public space experiences continues to proliferate, companies may even consider add revenue-generating opportunities to attract non-guests (CoStar, 2022).

Moreover, hotel managers can refer to our results when contemplating how intensively to invest in hotels' public spaces based on certain characteristics (e.g., hotel class, expected occupancy, and surrounding accessibility). High-class (e.g., luxury) hotels in surroundings with low accessibility must be particularly mindful of public space management during off-peak seasons when occupancy level is not high. Our findings suggest that, in such situations, hotel managers should innovatively design public space and craft appealing social environments to enrich guests' experiences, value perceptions, and behavioral intentions. This echoes the emerging all-inclusive resortainment concepts that fuse lodging, entertainment, theme park and retail experiences all in one (The Wall Street Journal, 2022). Their practitioners should be mindful of keeping the public space experience desirable, particularly during the early years right after property opening when the occupancy rate is yet to rise. Our findings on the moderating role of other customers in conditioning the impact of public experiences on guest responses also points to the possibility of fusing experience management with revenue management. Hotel managers may consider implement dynamic pricing for the experiential amenities provided in the hotel's public space. For instance, hotel managers may consider charging a higher price of their experiential amenities to alleviate social density in the public space. That way they can maximize the revenue-generating opportunity while amplifying the positive impact of public space experiences.

# 5.3. Limitations and directions for future research

Despite its contributions, this paper is subject to several limitations that should be addressed in later studies. First, we have provided further support for the psychological ownership theory. Yet related factors (e.g., self-investment, control, and knowledge management) were not directly measured and tested here. Scholars can attend to these factors in greater depth in the future. Second, it is important to point out that the customer survey data utilized in this study was collected after the stay. Customers' responses generated based on the post-experience recall may be different from their on-site perceptions. Future research may consider using on-site surveys or other real-time measurement techniques to assess customer responses to their experiences in hotel spaces.

In addition, our research is bounded by the temporal scope of the accessible data, which was collected well before Covid-19. The onset of the Covid-19 pandemic had changed our responses and behaviors, just as its ending will change how we engage with and perceive others in public spaces again. That change may result in us, temporally or more chronically, approaching social perceptions and interactions in a manner that is either consistent or different from the pre-pandemic normal. In case we are shifting back to the pre-pandemic normal, the findings from the past may have important implications for the future. We don't want to take the stance to assume that individuals will or will not behave in completely different ways in social settings as conditioned by Covid-19. While we don't have the luxury to access such an expanded dataset to examine this, we propose it as a direction for future research to examine.

# Credit author statement

Dr. Laurie Wu contributed to the conceptualization and the writing of the paper. Dr. Peng Liu contributed to the data collection, empirical analysis, and research design. Dr. (Jenny) Dung Le contributed to the literature review and data analysis of the paper.

# Impact statement

The study titled "The role of public space in constructing experience capital: A longitudinal analysis in the hotel context" presents a comprehensive, theory-driven analysis on the role of public space in constructing a hotel's experience capital.

This study uses a longitudinal hotel industry dataset merging information from customer surveys, property performance, and environmental insights to reveal the positive effects of customers' public space experiences on their overall service experiences, perceived value of the experience, revisit intentions, and recommendation intentions. Based on psychological ownership theory, the variables of hotel class, other customers, and setting accessibility were empirically verified as moderators conditioning the positive impact of public space. This endeavor advances academic and practical debates on third place, the psychological ownership of space, and space utilization and hotel experience design. Extending theoretical knowledge of the role of psychological ownership in consumption places (Griffiths & Gilly, 2012; Wu et al., 2014), the findings highlight the complex process of how various public space vectors (e.g., shared living space, urban space) (Chan & Zhang, 2021) and their inhabitants jointly construct a hotel's experience capital. The research outcomes offer valuable practical implications for hotel managers in redesigning, renovating, and optimizing hotel spaces-specifically public spaces.

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#### References

- Altman, I. (1975). The environment and social behavior: Privacy, personal space. Territory, Crowding: Wadsworth (Monterey, CA).
- Aubert-Gamet, V., & Cova, B. (1999). Servicescapes: From modern non-places to postmodern common places. *Journal of Business Research*, 44(1), 37–45.
- Beggan, J. K. (1992). On the social nature of nonsocial perception: The mere ownership effect. Journal of Personality and Social Psychology, 62(2), 229–237.
- Belk, R. W. (1988). Possessions and the extended self. Journal of Consumer Research, 15 (2), 139–168.
- Chang, A., Chiang, H. H., & Han, T. S. (2012). A multilevel investigation of relationships among brand-centered HRM, brand psychological ownership, brand citizenship behaviors, and customer satisfaction. *European Journal of Marketing*, 46(5), 626–662.
- Chan, J. K. H., & Zhang, Y. (2021). Sharing space: Urban sharing, sharing a living space, and shared social spaces. Space and Culture, 24(1), 157–169.
- Choi, C., & Mattila, A. S. (2016). The effects of other customers' dress style on customers' approach behaviors: The moderating role of sense of power. *Cornell Hospitality Quarterly*, 57(2), 211–218.
- CoStar. (2022). Resort managers price services, amenities to maximize revenue opportunities. Retrieved from.
- Deng, W., Lu, C., Lin, Y., & Chen, W. (2021). A study on the effect of tourists value cocreation on the perceived value of souvenirs: Mediating role of psychological ownership and authenticity. Asia Pacific Journal of Tourism Research, 26(2), 200–214. https://doi.org/10.1080/10941665.2020.1763411

Hotel Designs. (2021). How will hotel public spaces overcome Covid-19?. Retrieved from. Dittmar, H. (1992). Perceived material wealth and first impressions. British Journal of Social Psychology, 31(4), 379–391.

- Fernandes, T., & Fernandes, F. (2018). Sharing dissatisfaction online: Analyzing the nature and predictors of hotel guests negative reviews. *Journal of Hospitality Marketing & Management*, 27(2), 127–150.
- Fernandez, S. (2021). How human touch in service encounters makes a winning customer experience strategy. Retrieved from.
- Francis, M. (1989). Control as a dimension of public-space quality. In Public places and spaces (pp. 147–172). Boston, MA: Springer.
- Fuchs, C., Prandelli, E., & Schreier, M. (2010). The psychological effects of empowerment strategies on consumers' product demand. *Journal of Marketing*, 74(1), 65–79.
- Gensler. (2018). Reimagining the hotel lobby as a vibrant social hub. Retrieved from. Gilovich, T., Kumar, A., & Jampol, L. (2015). A wonderful life: Experiential consumption and the pursuit of happiness. Journal of Consumer Psychology, 25(1), 152–165.

Goodwin, C. (1992). Privacy as a dimension of service experience. ServiceScapes: The concept of place in contemporary markets. Chicago, Illinois: American Marketing Association. Griffiths, M. A., & Gilly, M. C. (2012). Dibs! Customer territorial behaviors. Journal of Service Research, 15(2), 131–149.

Hanks, L., & Line, N. D. (2018). The restaurant social servicescape: Establishing a

nomological framework. International Journal of Hospitality Management, 74, 13–21. Hanks, L., Line, N., & Yang, W. (2017). Status seeking and perceived similarity: A

consideration of homophily in the social servicescape. *International Journal of Hospitality Management*, 60, 123–132.
Hanks, L., Line, N. D., & Zhang, L. (2021). Expanding the methodological approach to the

Franks, E., Eller, N. D., & Zhang, E. (2021). Explanding the methodological approach to the social servicescape: Moving from measurement to manipulation. *Cornell Hospitality Quarterly*, 62(1), 157–168. https://doi.org/10.1016/j.tourman.2021.104320

Hou, Y., Zhang, K., & Li, G. (2021). Service robots or human staff: How social crowding shapes tourist preferences. *Tourism Management*, 83, Article 104242.

Huang, W. H., Lin, Y. C., & Wen, Y. C. (2010). Attributions and outcomes of customer misbehavior. Journal of Business and Psychology, 25(1), 151–161.

Hui, M. K., & Bateson, J. E. (1991). Perceived control and the effects of crowding and consumer choice on the service experience. *Journal of Consumer Research*, 18(2), 174–184.

Hu, F., Teichert, T., Deng, S., Liu, Y., & Zhou, G. (2021). Dealing with pandemics: An investigation of the effects of COVID-19 on customers' evaluations of hospitality services. *Tourism Management*, 85, Article 104320.

Kerr Forster Associates, P. (1993). Factors influencing the design of hotels. International Journal of Contemporary Hospitality Management, 5(2), 17–19.

Kim, J. J., Lee, Y., & Han, H. (2019). Exploring competitive hotel selection attributes among guests: An importance-performance analysis. *Journal of Travel & Tourism Marketing*, 36(9), 998–1011. https://doi.org/10.1080/10548408.2019.1683484

Kim, H., & So, K. K. F. (2022). Two decades of customer experience research in hospitality and tourism: A bibliometric analysis and thematic content analysis. *International Journal of Hospitality Management*, 100, Article 103082.

Kirk, C. P., McSherry, B., & Swain, S. D. (2015). Investing the self: The effect of nonconscious goals on investor psychological ownership and word-of-mouth intentions. *Journal of Behavioral and Experimental Economics*, 58, 186–194.

Kotler, P., Bowen, J. T., & Baloglu, S. (2021). Marketing for hospitality and tourism. Hoboken, NJ: Pearson.

Kuhzady, S., & Ghasemi, V. (2019). Factors influencing customers' satisfaction and dissatisfaction with hotels: A text-mining approach. *Tourism Analysis*, 24(1), 69–79.

Le, D., & Phi, G. (2021). Strategic responses of the hotel sector to COVID-19: Toward a refined pandemic crisis management framework. *International Journal of Hospitality Management, 94*, Article 102808. https://www.ncbi.nlm.nih.gov/pmc/arti cles/PMC8586793/pdf/main.pdf.

Li, Y., & Du, T. (2018). Assessing the impact of location on hotel development: An analysis of Manhattan hotels, 1822–2012. *Papers in Applied Geography*, 4(1), 21–33.

Line, N. D., & Hanks, L. (2019). The social servicescape: Understanding the effects in the full-service hotel industry. *International Journal of Contemporary Hospitality Management*, 31(2), 753–770. https://doi.org/10.1108/IJCHM-11-2017-0722

Line, N. D., Hanks, L., & Kim, W. G. (2018). An expanded servicescape framework as the driver of place attachment and word of mouth. *Journal of Hospitality & Tourism Research*, 42(3), 476–499.

Lee, S., & Chuang, N.-K. (2021). Applying expanded servicescape to the hotel industry. Journal of Hospitality & Tourism Research, 46(4), 771–796.

Li, S. (2021). Linking servicescape and customer engagement: An investigation in the hotel context. *International Journal of Hospitality Management, 94*, Article 102880.

Li, S., Qu, H., & Wei, M. (2021). Antecedents and consequences of hotel customers' psychological ownership. *International Journal of Hospitality Management, 93*, Article 102773. https://doi.org/10.1016/j.ijhm.2020.102773

Line, N. D., Runyan, R. C., Costen, W., Frash, R., & Antun, J. M. (2012). Where everybody knows your name: Homophily in restaurant atmospherics. *Journal of Hospitality Marketing & Management*, 21(1), 1–19.

Liu, M. T., Wong, I. A., Tseng, T. H., Chang, A. W. Y., & Phau, I. (2017). Applying consumer-based brand equity in luxury hotel branding. *Journal of Business Research*, 81, 192–202.

Liu, P., Wu, L., & Li, X. (2022). What can hotels learn from the last recovery? Examining hotel occupancy rate and the guest experience. *International Journal of Hospitality Management, 103*, Article 103200.

Lockyer, T. (2005). The perceived importance of price as one hotel selection dimension. *Tourism Management*, 26(4), 529–537.

Lu, L., Lee, L., Wu, L., & Li, X. (2022). Healing the pain: Does COVID-19 isolation drive intentions to seek travel and hospitality experiences? *Journal of Hospitality Marketing* & Management. https://doi.org/10.1080/19368623.2022.2029726

Marriott International. (2021). Courtyard by Marriott signals brand evolution to reinvigorate its North American portfolio. Retrieved from:.

Mishra, A., & Gupta, A. (2019). Green hotel servicescape: Attributes and unique experiences. Current Issues in Tourism, 22(20), 2566–2578. https://doi.org/10.1080/ 13683500.2018.1502259

Moon, H., Yu, J., Chua, B.-L., & Han, H. (2022). Hotel privacy management and guest trust building: A relational signaling perspective. *International Journal of Hospitality Management*, 102, Article 103171.

Muraven, M., & Baumeister, R. F. (2000). Self-regulation and depletion of limited resources: Does self-control resemble a muscle? *Psychological Bulletin*, 126(2), 247–259.

Neuvonen, M., Pouta, E., & Sievänen, T. (2010). Intention to revisit a national park and its vicinity: Effect of place attachment and quality perceptions. *International Journal* of Sociology, 40(3), 51–70. Nuttin, J. M., Jr. (1987). Affective consequences of mere ownership: The name letter effect in twelve European languages. *European Journal of Social Psychology*, 17(4), 381–402.

Oh, H. (2000). The effect of brand class, brand awareness, and price on customer value and behavioral intentions. Journal of Hospitality & Tourism Research, 24(2), 136–162.

Oldenburg, R. (Ed.). (2001). Celebrating the third place: Inspiring stories about the great good places at the heart of our communities. Da Capo Press.

O'Neill, J. W., & Mattila, A. S. (2006). Strategic hotel development and positioning: The effects of revenue drivers on profitability. *Cornell Hotel and Restaurant Administration Quarterly*, 47(2), 146–154.

Otto, J. E., & Ritchie, J. B. (1996). The service experience in tourism. *Tourism Management*, 17(3), 165–174.

Peck, J., & Shu, S. B. (2009). The effect of mere touch on perceived ownership. Journal of Consumer Research, 36(3), 434–447.

Pierce, J. L., Kostova, T., & Dirks, K. T. (2001). Toward a theory of psychological ownership in organizations. Academy of Management Review, 26(2), 298–310.

Pierce, J. L., Kostova, T., & Dirks, K. T. (2003). The state of psychological ownership: Integrating and extending a century of research. *Review of General Psychology*, 7(1), 84–107.

Pine, B. J., & Gilmore, J. H. (2011). The experience economy. Boston, Massachusetts: Harvard Business Press.

Prayag, G., & Ryan, C. (2012). Antecedents of tourists' loyalty to Mauritius: The role and influence of destination image, place attachment, personal involvement, and satisfaction. *Journal of Travel Research*, 51(3), 342–356.

Sampson, H. (2020). Hotels turned their lobbies into a social hub. Then came the coronavirus. Retrieved from.

Sandiford, P. J. (2019). The third place as an evolving concept for hospitality researchers and managers. Journal of Hospitality & Tourism Research, 43(7), 1092–1111.

Sartre, J. P. (1969). Being and noth ingness: A phenomenological essay on ontology. New York: Philosophical Library. First published in 1943.

Schmidt, D. E., & Keating, J. P. (1979). Human crowding and personal control: An integration of the research. *Psychological Bulletin*, 86(4), 680–700.

Sim, J., Mak, B., & Jones, D. (2006). A model of customer satisfaction and retention for hotels. Journal of Quality Assurance in Hospitality & Tourism, 7(3), 1–23.

Smallwood, J. (2021). *Human interaction – the hallmark of a luxury travel experience*. Retrieved from.

So, K. K. F., & King, C. (2010). When experience matters": Building and measuring hotel brand equity: The customers' perspective. *International Journal of Contemporary Hospitality Management*, 22(5), 589–608.

Song, Y., Liu, K., Guo, L., Yang, Z., & Jin, M. (2022). Does hotel customer satisfaction change during the COVID-19? A perspective from online reviews. *Journal of Hospitality and Tourism Management*, 51, 132–138. https://doi.org/10.1016/j. jhtm.2022.02.027

Sørensen, F., & Jensen, J. F. (2015). Value creation and knowledge development in tourism experience encounters. *Tourism Management*, 46, 336–346.STR. (2022). *Glossory: Class.* Retrieved from.

The Wall Street Journal. (2022). Hotel owners embrace 'resortainment' to boost business. Retrived from https://www.wsj.com/articles/hotel-owners-embrace-reso rtainment-to-boost-business-11661204144.

Thomas, J., & Reyes, R. (2021). National walkability index: Methodology and user guide, 2021. Available from:

Tombs, A. G., & McColl-Kennedy, J. R. (2010). Social and spatial influence of customers on other customers in the social-servicescape. *Australasian Marketing Journal*, 18(3), 120–131.

von Wallpach, S., Hemetsberger, A., Thomsen, T. U., & Belk, R. W. (2020). Moments of luxury–A qualitative account of the experiential essence of luxury. *Journal of Business Research*, 116, 491–502.

Introduction: The reinsertion of space into the social sciences and humanities. In Warf, B., & Arias, S. (Eds.), *The spatial turn: Interdisciplinary perspectives*, (pp. 1–10). (2009) (pp. 1–10). London, England: Routledge.

Wu, L. L., Mattila, A. S., & Han, J. R. (2014). Territoriality revisited: Other customer's perspective. International Journal of Hospitality Management, 38, 48–56.

Xu, X., & Li, Y. (2016). The antecedents of customer satisfaction and dissatisfaction toward various types of hotels: A text mining approach. *International Journal of Hospitality Management*, 55, 57–69. https://doi.org/10.1016/j.ijhm.2016.03.003

Yadav, M. L., & Roychoudhury, B. (2019). Effect of trip mode on opinion about hotel aspects: A social media analysis approach. *International Journal of Hospitality Management, 80*, 155–165. https://doi.org/10.1016/j.ijhm.2019.02.002

Yang, Y., Luo, H., & Law, R. (2014). Theoretical, empirical, and operational models in hotel location research. *International Journal of Hospitality Management*, 36, 209–220.

Yang, W., Zhang, L., & Mattila, A. S. (2016). Luxe for less: How do consumers react to luxury hotel price promotions? The moderating role of consumers' need for status. *Cornell Hospitality Quarterly*, 57(1), 82–92.

Zajonc, R. B. (1965). Social facilitation: A solution is suggested for an old unresolved social psychological problem. *Science*, 149(3681), 269–274.

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