Title: A patterns perspective of customers' brand experiences with robotics in hospitality

Abstract

This study presents a framework that captures the patterns amongst the four different dimensions of customers' brand experiences with robotics by connecting tourism and hospitality research with the humanities literature on micro-stories. By analyzing narratives on an emerging social platform, the study shows that behavioral and cognitive experiences could elicit affective experiences that act as an interface before sensory experiences. The framework presented in this study provides implications into how the different dimensions of brand experiences could influence the marketing strategies of hotels with robotics.

Keywords: robotics; brand experience; marketing; customers; stories

Introduction

There is increasing interest in the concept of brand experience in tourism and hospitality research. Brand experience represents customers' perceptions during moments of contact with a brand (Brakus et al., 2009). It is crucial for differentiating a brand from others, and for maintaining long-term relationships with customers (Lee et al., 2001). Customers' loyalty with a business could also be improved by enhancing their brand experience (Iglesias et al., 2011).

Given the importance of facilitating brand experiences, recent studies have sought to connect this concept with the context of robotics technology in tourism and hospitality research. Hwang et al., (2022) examined how brand authenticity is formed depending on robot service employees versus human service employees. Others studies investigated hotel managers or employees' perceptions of service robotics (Vatan & Dogan, 2021); factors that influence customers' attitudes towards service robotics (Ivanov et al., 2018) as well as their willingness to pay (Ivanov & Webster, 2021) and intention to use service robotics (Hou et al., 2021; Lee et al., 2021).

Despite insights from previous studies, there are research gaps to be further addressed. Conceptually, there are four dimensions of brand experience: sensory, affective, cognitive, and behavioural. Existing studies have generally considered these dimensions from an independent rather than from a patterns perspective. For instance, Hwang et al. (2021) evaluated the influence of each of the four dimensions of brand experience from robotic baristas on brand satisfaction, brand attitude, brand attachment, and brand loyalty. Ye et al. (2021) measured each of the four dimensions of hotel brand experiences independently, but did not consider how these dimensions connect with each other.

This is a crucial conceptual gap because the connections amongst the four dimensions need to be considered together, since they form a customer's overall evaluation of brand experience. For example, when customers recollect their brand experiences with robotics, they may initially focus on the behaviours or functions of the robot before they discuss their feelings of the experience. Alternatively, they may focus on the appearance (e.g., visual sensory experience) before the

functions or behaviours of the robot. These examples highlight the idea that the four dimensions are connected with each other through 'patterns'; yet, research into the concept of patterns in brand experiences has not been addressed in the literature.

Furthermore, previous studies mainly focused on quantitative measurements of brand experiences with robotics. For instance, Chan and Tung (2019) adopted experimental design to investigate the effects of robotic service and the moderating role of hotel segment on guests' evaluations of hotel brand experiences. Liu et al. (2021) adopted structural equation modeling to examine the mediating effects of brand image on brand experience and brand loyalty at upscale hotels. While quantitative studies measure the extent to which customers rate their experiences, it does not provide deeper insights into 'how' customers share their brand experiences, such as the words they use and narratives that they write. Since customer's narratives represent crucial word-of-mouth (e.g., on social media), qualitative research into how customers write and reflect on their brand experiences could help address this gap.

Based on the aforementioned gaps, the research question of this study is: "How do customers narrate 'patterns' amongst the four dimensions of brand experiences?" To address this research question, the objective of this study is to connect tourism research with the humanities literature on 'micro-stories' to understand how customers share their brand experiences. In the humanities literature, the term 'micro-stories' refer to real-life experiences that have been shortened into brief, emotional, and entertaining stories so that readers can digest information with speed in a fast-paced society (Botha, 2016; Vecchio, 2020). It focuses on sequence of events with a structured beginning, middle, and end (Hsu, 2008). Micro-stories are increasing in popularity as individuals write about their experiences (e.g., such as with robotics) in an entertaining and fun approach; however, micro-stories have not been investigated in the tourism literature and certainly deserve more attention.

Overall, this study seeks to contribute to tourism research by bridging the humanities literature on micro-stories for a fresh and deeper understanding of customers' brand experiences with robotics. This study also contributes by presenting a novel framework to highlight the patterns in which customers share the four dimensions of brand experiences in their narratives. In doing so, the framework presented in this study could provide marketers with insights into how customers are narrating their hotel brand experiences in a promising literacy format that is enjoyable, engaging, and immersive.

Literature Review

Tourism and hospitality research on brand experiences

Brand experiences are defined as "…sensations, feeling, cognition and behavioural responses evoked by brand-related stimuli that are part of a brand's design and identity, packaging, communications, and environments" (Brakus et al., 2009, p.52). It connects a brand and the organization to the customers' lifestyle, which is ever more crucial given the increasing competitiveness in tourism. Customers may experience a brand subjectively, functionally, and holistically, and the key for organization is to help customers identify and distinguish an

organization from others as competitors may offer similar and substitutable experiences (Gentile et al., 2007).

There are four dimensions of brand experiences: sensory, affective, cognitive, and behavioural experiences (Brakus et al., 2009). Sensory experiences are multisensory perceptions through the sense of smell, sight, touch, taste, and hearing (Agapito et al., 2013). Cognitive experiences stimulate customers' problem-solving and curiosity that results from their thought-processes and interpretations (Ahn & Back, 2018). Behavioural experiences involve the body as a whole such as customers' physical actions during an experience (Barnes et al., 2014). Finally, affective experiences represent customers' emotional connections with a brand and influences the quality of the relationship they build with an organization (Kumar & Kaushik, 2018). Table 1 summarizes the objectives and findings of select, recent studies that have specifically examined the concept of brand experiences with robotics in tourism and hospitality.

--- Insert Table 1 here ---

Table 1. Recent studies on brand experiences in tourism and hospitality research

Author(s)	Objective(s)	Key Finding(s)	Methodology
Hwang et al. (2021)	To examine the antecedents and consequences of brand satisfaction and the moderating effect of barista type (robot barista and human barista)	Four dimensions of brand experience increased brand satisfaction, thereby enhanced the brand attitude, brand attachment, and brand loyalty. Barista type moderated the relationship between i) sensory brand experience and brand satisfaction and ii) intellectual brand experience and brand satisfaction	Data were collected in South Korea from 334 customers from a coffee shop operated by robot baristas and 352 customers from a coffee shop operated by human baristas. Confirmatory factor analysis (CFA) structural modeling, measurement invariance assessment and multiple-group analysis were used for data analysis.
Liu and Hu (2021)	To explore the relationship between perceived brand experience and brand loyalty and the mediating effect of brand positioning.	The perceived brand experience influenced brand loyalty significantly and positively. However, the mediating effect of brand positioning was insignificant.	Data were collected via survey of 334 mainland Chinese tourists staying at upscale hotels in Taiwan. Exploratory factor analysis (EFA) was used to test variables.
Liu et al. (2021)	To examine the composition and structure of hotel brand experience and investigate the mediating effect of brand image on brand experience and brand loyalty.	Hotel brand experience positively influenced brand image and brand loyalty while brand image positively influenced brand loyalty. However, brand image did not mediate the	Data were collected from questionnaire survey of 334 mainland Chinese tourists staying at upscale hotels in Taiwan. Structural equation modeling (SEM)

		relationship between brand experience and brand loyalty.	was used for data analysis.
Teng and Chen (2021)	To explore the relationship between innovativeness and brand attachment and the mediating effect of memorable brand experience.	Menu innovativeness and experiential Innovativeness had a positive effect on brand attachment via the mediating effect of memorable brand experience.	Data were collected from 470 customers from coffee shops in Taiwan. SEM was used to test hypotheses.
Ye et al. (2021)	To develop and test a conceptual model in which servicescape promotes customers' mindfulness and improves the brand experience based on the stimulus–organism–response (SOR) paradigm, a conceptual model.	The relationship between perceived hotel servicescape and brand experience was mediated by customers' mindfulness. Hotel guests' length of stay negatively moderated the relationship between mindfulness and brand experience.	Data were collected from a questionnaire survey of 644 customers from 3–5-star hotels in China. SEM was used to test hypotheses.
Touni et al. (2020)	To explore the antecedents and consequences of customer engagement (CE) in a hotel's Facebook brand community.	Customer–brand experience and customer involvement were two important antecedents of CE while CE enhanced customer–brand relationships. CE mediated the relationship between customer brand experience and brand relationship quality.	Data were collected from 347 customers who had experienced one of the hotel brands among the 10 selected hotel brands in the past 12 months and were the followers of that hotel brand's Facebook brand community. SEM was used for data analysis.
Ahn et al. (2019)	To analyze the influence the brand experiential value on customers' co-creation attitude and behavior.	Brand experiential value dimensions (perceived playfulness, return on investment, and service excellence) were important antecedents of customers' co-creation attitude. Customers' co-creation attitudes (interaction, knowledge sharing, and responsive attitudes) influenced their co-creation behavior toward a service brand.	Data were collected from an online survey of 629 customers who had visited integrated resorts. PLS-SEM was used for data analysis.
Chan and Tung (2019)	To investigate the effects of robotic service and the moderating role of hotel segment on guests' evaluations of hotel brand experiences.	There were higher levels of sensory and intellectual experiences from robotic service but lower levels of affective experience. For behavioral experience, robotic service influenced a higher rating for midscale and budget hotels, but not	2 (service delivery video: human or robot) x 3 (hotel segment: budget, midscale, or luxury) between-subjects experimental design.

		for a luxury hotel. Robotic service may not necessarily enhance brand experiences as influenced by the moderating role of hotel segment.	
Ahn and Back (2018)	To explore the effect of customers' perception of the integrated resort on brand reputation, brand experience, brand attitude, and behavioral intention.	Brand reputation increased customers' perception of brand experience and brand attitude and thus increased customers' revisit intention. The mediating roles of brand experience and brand attitude were significant in the relationship between brand reputation and behavioral intention	Data were collected in the USA via a descriptive online survey of 443 participants. multiple regression analysis was conducted for data analysis.
Nysveen et al. (2018)	To investigate the influence of brand innovativeness and green image on hotel customers' brand experience dimensions and, through that, on brand satisfaction.	Perceived brand innovativeness and green image positively influenced brand experience dimensions.

The effects of perceived brand innovativeness and green image on brand satisfaction were partially mediated by brand experience dimensions because of the insignificant influences of affective and relational experiences on brand satisfaction | Data were collected through a questionnaire survey of 283 prior guests of a hotel located in Norway. SEM was used to test hypotheses. |
Ong et al. (2018)	To examine influences of brand experience components on customers' true brand loyalty.	Intellectual experience had positive influenced on all dimensions of brand loyalty (Willingness to Pay More, Repurchase Intentions, Word of Mouth) while other brand experiences dimensions (sensory, affective and behavioral experiences) did not.	Data were collected through survey of 228 customers who had dined in one of the two SME casual dining restaurant brands in Malaysia. Data were analyzed using PLS-SEM.
Kang et al. (2017)	To investigate the influence of hotel guests' experiences with name-brand hotels on their brand knowledge, brand attachment, and brand trust towards the hotels.	Brand experience had positive and significant influences on brand-related variables (brand knowledge, brand attachment, and brand trust) were found.	Data were collected via questionnaire survey of 250 hotel guests staying at name-brand hotels in Malaysia. CFA and SEM were used for data analysis.
Khan and Rahman (2017a)	To identify the factors that influence hotel brand experience and examine the inter-relationships among them.	Hotel location, attractive hotel website, and active engagement in social media were significant enablers of hotel brand experience.	Applied interpretive structural modeling (ISM) approach to develop a hierarchy-based model of hotel brand experience.

Khan and Rahman (2017b)	To propose and validate the measuring scale of hotel brand experience.	Hotel location, hotel stay and ambience, staff competence, hotel website and social media experience and guest-to-guest experience were the important constructs of hotel brand experience. The significant impact of hotel on revisit intention and word-of-mouth confirmed nomological validity scale.	83 participants were recruited through focus groups or survey to identify important constructs of hotel brand experience. 278 and 623 participants were recruited through survey for pre-test and validity testing respectively. CFA and SEM were used to test the validity.
Manthiou et al. (2016)	To investigate the formation of customers' brand experience and examine the relationship among brand experience, brand knowledge and brand loyalty toward name-brand hotels.	Brand experience consists of sensory, affective, behavioral, and intellectual dimensions. The positive influence of brand experience on brand loyalty, was partially mediated by brand knowledge.	Data were collected through survey of 250 foreign travelers who stayed in name-brand hotels in Malaysia. Applied CFA and SEM for data analysis.

A synthesis of the findings in Table 1 highlights several critical issues. Previous studies have either (1) evaluated overall brand experience as a singular measure without conceptualizing the four distinct dimensions, or (2) assessed each of the dimensions as independent constructs rather than analyzing the conceptual connections amongst them. For example, Liu and Hu (2021) evaluated brand experience as a summation of 18 items (e.g., "This hotel's design is soothing" and "staying at this hotel makes me feel warm"), without reflecting on the conceptual contributions of each of the four dimensions. Teng and Chen (2021) measured brand experiences with only three items that assessed the memorability a previous food and beverage experience. Interestingly, Ye et al. (2021) first evaluated each of the four dimensions of hotel brand experiences, but later combined the four dimension together into a composite score without highlighting how each dimension in itself could be affected by a hotel's service environment. These examples show that many previous studies tended to oversimplify the concept of brand experiences by combining it into an aggregate 'score', although each of the four dimensions are conceptually distinct.

Meanwhile, previous studies that attempted to evaluate each of the dimensions of brand experiences independently failed to analyze the conceptual connections amongst them. For example, Ong et al. (2018) found that only intellectual brand experiences positively influenced brand loyalty at a casual dining restaurant, but the authors did not consider how intellectual experiences could be affected by how consumers made sense (i.e., sensory) of their surroundings at the restaurant in the first place. Chan and Tung (2019) found that customers reported higher levels of sensory and intellectual experiences from robotic service but lower levels of affective experience. However, the authors did not consider how intellectual experiences could connect with behavioural experiences since tacit knowledge of robotic functions (e.g., how to operate a robot) is a prerequisite before actually 'using' it. These examples show that previous studies failed to consider how each of the dimensions of brand experiences are connected with each

other, as one dimension could affect another. The present study addresses this gap by presenting a novel framework to highlight the patterns in which customers connect the four dimensions of brand experiences together.

Connecting brand experiences with hotel robotics

Customers' evaluations of the four dimensions of brand experiences could be affected by their engagement with robotics. Organizations could facilitate sensory experiences by making a strong impression on customers' sensations, such as through their visual and auditory perceptions. For example, the ability of robotics to exhibit intermixed morphologies could be quite engaging for customers (Tung & Law, 2017). They could be designed in non-humanoid and/or zoomorphic forms such as seals and dinosaurs while performing complex tasks. Robots could also blend human voice with animals sounds to stimulate unique auditory experiences. The use of robotics for cognitive experiences could be an interesting concept in tourism and hospitality. Robotics could engage customers on a different level of thinking and even foster problem solving as they may need to learn how to use the technology during their experience (Delgosha & Hajiheydari, 2021). Problem solving skills would be even more salient during robotic service failures. For instance, robotics may have faultiness in the level of voice and/or language recognition, especially in the case of strong accents from customers. In this case, customers may have to activate, navigate, and think about the desired functions via a touchscreen instead if the level of voice recognition is incoherent.

Facilitating behavioural experiences require customers to engage in a certain extent of physical actions so they perceive a brand as action-oriented (Brakus et al., 2009). In this regard, the nature of robotics may require customers to be more physically involved, particularly during service encounters (Tuomi et al., 2021). For example, in a hospitality context, room service from a human staff could be as straightforward as calling for assistance and then waiting for delivery. With robotics, however, when a robot arrives with deliverables such as drinks or toiletries to a room, guests would need to approach the robot and engage in a series of 'self-service' actions (i.e., press the buttons on the robot's screen to open the storage area, take the deliverables by themselves, complete the transaction, and then press a button again to direct it to leave). As this example shows, robotics would require customers to engage in a comparatively higher level of involvement.

Affective experiences are crucial in hospitality (Manthiou et al., 2016). They could be influenced by service encounters between customers and employees across different points of engagement (Torres et al., 2019). For instance, hotel guests and staff may engage in friendly, delightful conversations during check-in at front desk, inquiries at concierge, and dialogue at food and beverage outlets. These engagements may induce positive emotional responses that affect the hotel's brand experience. Robotics, however, cannot match the deep levels and types of emotional expressions that humans can convey. Although robots may be able to display 'emoticons' and animations of facial expressions on a screen, it is not comparable to the feelings of sincerity and genuineness that humans can express (Vatan & Dogan, 2021).

Literature perspective of micro-stories

In the humanities literature, the term 'micro-stories' refers to narratives that seek to condense a big, rich and complex story into the fewest words possible (Vecchio, 2020). In other words, micro-stories are a specific type of narrative that shortens a larger or broader account, sequence of incidents or events (Hsu, 2008). Micro-stories may also be referred to as short-shorts or flash fiction in the case of imaginary events and people. In contrast, content analysis is not a concept per se; it is a methodological approach where text is analyzed (e.g., by frequency of keywords).

While there is no universal definition to the exact word count of a micro-story, previous works have been around 500 words (Southeast Review, 2021). Micro-stories embrace brevity and organization as its core characteristics (Medina, 2016) (see Figure 1).

--- Insert Figure 1 here ---

Figure 1. Micro-stories: Organization, brevity, and key characteristics of narratives
Figure 1 Alt Text: Model showing the beginning, middle, and end of micro-stories
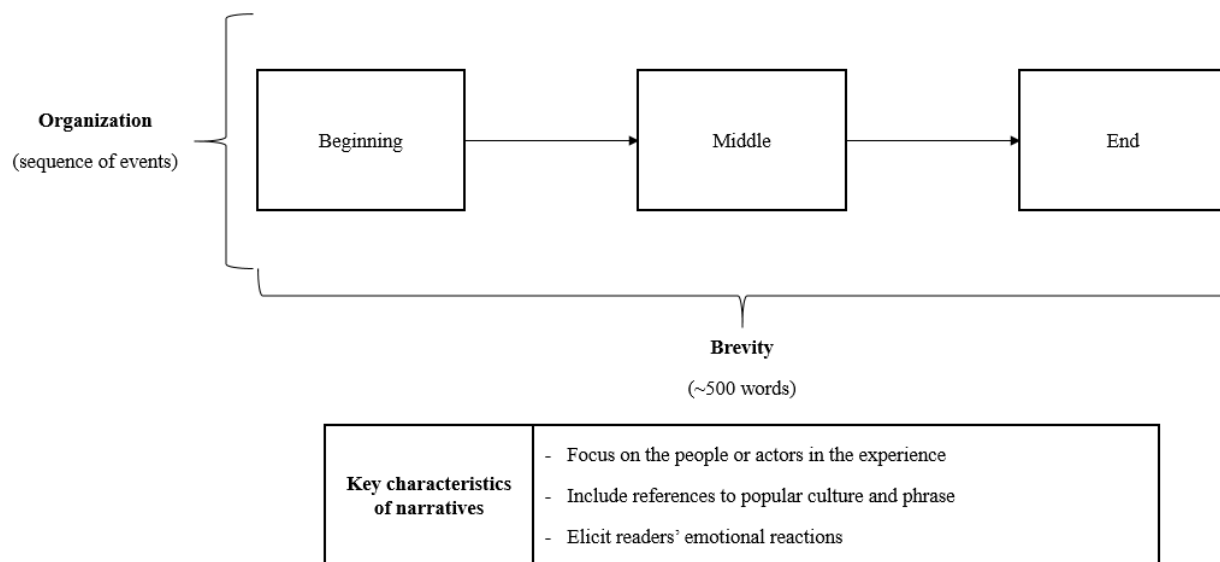
For micro-stories that involve real-life experiences, the organization of narratives involves the recounting of a sequence of events with beginning, middle, and end, as well as their meanings to the storyteller. The goal for storytellers is to preserve and share their experiences in a form that is comprehensive to others (Barber, 2016). This form, however, is constraint by the brevity implications of micro-stories (Medina, 2016): first, narratives may focus on people or actors in the experience rather than devoting word count to describing physical 'spaces', especially in settings that are deemed as common or familiar. For example, customers may concentrate their narratives on the behaviours of a robot in the hotel, rather than dedicate precious word count on describing

the lobby or hallway of the property. In this way, the behavioural dimension of brand experiences with robotics could become the forefront of their narratives.

Second, micro-stories may include references to popular people and phrases to insinuate meaning that are considered well-recognized in society. In this way, the storytellers' 'new' experiences could be interpreted through 'old' memories that are commonly shared by readers (Goldstein, 2015). For instance, there are numerous stories of 'Jack Ma' and his entrepreneurial ventures in Chinese society. His name and stories are associated with meanings of innovation and technology. Micro-stories about the FlyZoo Hotel (under Alibaba Group) who referenced his name could be subtly insinuating a connection between high-tech and the intellectual dimension of brand experiences with robotics.

Finally, in an effort to produce complex meanings with a limited word count, micro-stories may emphasize reader's reactions; that is, they may seek to elicit reader's emotional reactions as much as possible. Provoking emotional responses is a core feature of narratives in stories (Popova, 2015). Often this may include an unexpected incident or challenge to convey an element of surprise. For example, customers may describe how excited they felt when they interacted with a hotel robot for the first time, thereby strongly conveying the affective dimension of brand experiences.

There are benefits from these characteristics of micro-stories as they relate to speed and attention (Botha, 2016). Today's society is highly fast-paced, where speed in everyday life is increasingly framed in terms of utility concerns (Bergener & Santarius, 2021). Readers are looking to digest information – and oftentimes, process as much information as possible – within a shorter attention span (Cheung, 2020). In this sense, the organization and brevity characteristics of micro-stories allow can readers to enjoy narratives in a richer and more entertaining way, while balancing their needs for speed and information.

Methodology

While travel and tourism has significantly dropped worldwide, China has reported a strong rebound over the last two quarters as recovery in domestic tourism superseded international travel. Fortunately, Chinese tourists have been posting their experiences via online platforms once again, which allows for possible data collection. Additionally, the use of robotics in tourism in China has gained momentum due to social distancing as well as health and safety concerns. Many hotels, such as FlyZoo Hotel (under Alibaba Group) and hotels under Leyeju Smart Hotel (a smart hotel brand in China) have launched robotics for providing concierge services (Maglof, 2020). This has allowed a wider breadth of customers to engage with robotics as part of their hotel brand experience.

While it is difficult to confirm the exact total number of hotels operating robots in China, the popular geographic areas are Hangzhou and Shanghai in eastern China, as well as Hainan and Shenzhen in southern China. For instance, Hangzhou is the headquarters of Alibaba, one of the largest Chinese multinational technology companies specializing in e-commerce, retail, and technology. An interesting fact is that Alibaba launched *FlyZoo*, a hotel in Hangzhou, that is staffed by robots and powered by AI in 2018. This is an interesting example where the destination, the hotel, and the technology company (i.e., Alibaba) are connected.

The initial process for collecting and analyzing micro-stories is as follows. First, hotels in China were selected as the study adopted a purposive sampling approach with respect to the choice of the social platform and the corresponding customers' narratives. Second the platform, Xiaohongshu, is a social media platform that targets the younger generation to 'mark' their diverse lives and daily activities. It provides and matches content for viewers through tags, audio, places, and titles of posts, and has over 300 million users with monthly activity exceeding 100 million (Xiaohongshu, 2022). Finally, Xiaohongshu is an emerging social platform in China that has over 100 million monthly active users (Qiangua, 2021). The narratives of hotel brand experiences with robotics in Xiaohongshu are oftentimes long and detailed (Chan, 2021). Narratives are written in an approach and relatable way for readers, and could even be in the form of descriptive 'diaries' about personal experiences.

In travel review sites, users would typically input the name of the destination, the general hotel brand, the specific name of the hotel, or the proximity of the search area. In Xiaohongshu, however, users may enter more generic search queries; for instance, after typing in the first three Chinese characters to denote 'robotics', the platform would auto-suggest 'hotel' as the last two characters in this study. Similarly, when users input the first two characters in Chinese to denote literally, 'no human', the last two characters for 'hotel' would be suggested. As these examples serve to show, the search results in this social platform emphasizes trends and popularities of keywords that supplement each other (i.e., robotics and hotels; 'no human' and hotels) that reflect a type of experience for users. Unlike review sites, the social platform does not directly map out locations of hotels or prioritize specific hotel brands according to price or ratings.

The study was conducted between May and September 2021. The timing is during the COVID-19 pandemic period 2020 to 2022. Customers' perceptions of hotel brand experiences with robotics could be quite different during the pandemic as compared to pre-pandemic times due to health and social distancing protocols between customers and employees (i.e., human-to-human and face-to-face interactions have been dramatically reduced during this time) (Cheung et al., 2021). Selecting entries after 2020 could ensure more consistency.

There were no selection criteria with respect to the location, type (e.g., chain or boutique), or brand name of the hotel since the objective of the study is to understand customers' narratives of hotel brand experiences from a conceptual level. By remaining open from a methodological perspective, this study reduces the limitations associated with a specific context (e.g., the purpose was not to narrow down to customers' experiences for a certain hotel brand in a certain district within a certain city and provincial location). Finally, each narrative was checked to ensure that they discussed 'robotics' before finalizing the sample.

Thematic analysis was used for interpreting the entries and connecting them to the four dimensions of brand experiences. It focuses on how narratives were constructed by writers, as well as the meaning ascribed these writers in the context of their experiences (Clarke & Braun, 2014). For example, Vatan and Dogan (2021) used thematic analysis according to different perspectives of hotel employees' perceptions of service robots to capture their specific views or emotions (e.g., positive and negative emotions towards robots). There were several steps to thematic analysis: (1) gathered narratives in relation to the theoretical perspective of this study, which was based on the

four dimensions of brand experiences: affective, cognitive, sensory, and behavioural; (2) extracted representative quotes to convey the essence of what each brand experience dimension is about without becoming overly complex for readers; (3) assigned different members of the research team to review the representative quotes; (4) discussed differences in interpretations of quotes in the four dimensions, and (5) resolved discrepancies by revisiting original narratives.

Overall, this study sought to capture information from customers' entries to gain insights into how well they thought the robots served their purposes, and how well the robots fit the brand experiences of the hotel. Please note that the research team did not calculate a quantitative statistic for inter-rater reliability; instead, the research team conducted discussions to resolve discrepancies, which is in line with thematic analysis as a qualitative approach that focuses on interpretations and meaning for fewer but deeper narratives in rich detail (Braun & Clarke, 2006). See Figure 2 for research methodology framework.

--- Insert Figure 2 here ---

Figure 2. Research methodology framework
Figure 2 Alt Text: Research methodology framework showing the selection, thematic analysis, and development of the framework of brand experiences
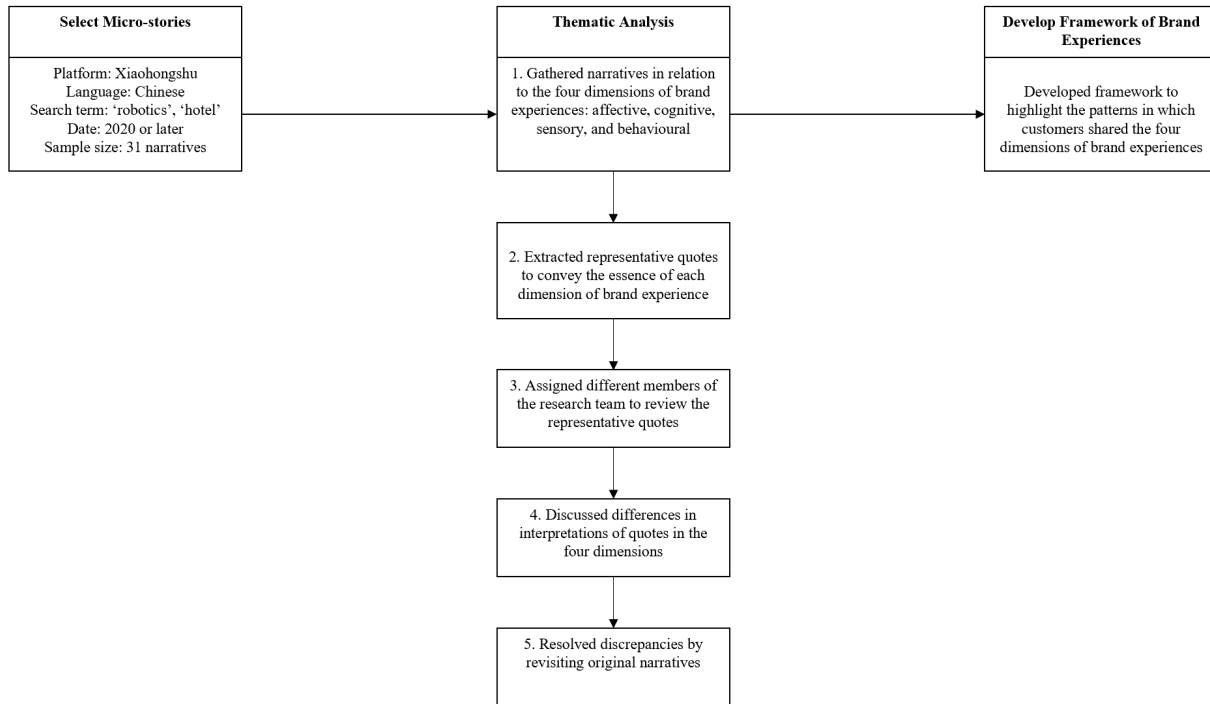
Results

A total of 31 narratives were analysed (see Table 2). Females wrote the majority of the narratives (24 out of 31; 77%), which reflects the gender-focused user-base in this social commerce platform (Qiangua, 2021). The location of the customers covered many parts of China, including Hainan in the southern-most point to Sichuan in the interior and Beijing in the north.

--- Insert Table 2 ---

Table 2. Profile of narratives

Narrative	Gender	Location of User	Purpose of Stay	Character Count
1	Female	Not specified	Leisure	501
2	Female	Hainan	Leisure	516
3	Female	Not specified	Leisure	529
4	Female	Hunan	Leisure	646
5	Female	Not specified	Leisure	748
6	Female	Shenzhen	Leisure	444
7	Female	Nanjing	Leisure	435
8	Female	Guangxi	Leisure	533
9	Male	Not specified	Leisure	507
10	Female	Zhejiang	Leisure	420
11	Female	Not specified	Leisure	474
12	Female	China	Leisure	471
13	Female	Not specified	Leisure	461
14	Female	Not specified	Leisure	415
15	Male	China	Leisure	496
16	Female	Not specified	Leisure	482
17	Female	Not specified	Leisure	466
18	Female	China	Leisure	405
19	Female	China	Leisure	519
20	Female	Hainan	Leisure	420
21	Not Specified	Not Specified	Leisure	496
22	Female	Beijing	Leisure	438
23	Female	Not specified	Leisure	415
24	Female	Not specified	Leisure	398
25	Female	Guangdong	Leisure	489
26	Male	Not specified	Leisure	440
27	Female	Sichuan	Leisure	491
28	Female	China	Leisure	571
29	Male	Hainan	Leisure	557
30	Female	Not specified	Leisure	587
31	Male	Not specified	Leisure	406

Note: Some customers did not specify their gender or specific location in China

Beginning of the micro-story: Setting the tone for sharing hotel brand experiences

The average length of the narratives was 490 characters, which reflects the brevity of micro-stories. This length is suitable for comprehensive for interpretation and customers were able to go into depth about their experiences. They did not write scripted, short, and undeveloped statements; instead, they took the effort to elaborate and reflect on their stay. For instance, customers began their narratives with a reflection of the brand name of the hotel before connecting the brand with their experiences with robotics. As one customer described:

> "I experienced Jack Ma papa's new high-tech hotel. The brand name is too cute: 'Must Stay'. It has been very popular lately. It feels like the first hotel brand with such high-tech and futuristic feeling." (Narrative #30)

There are several interesting points to note from this quote. The use of 'papa' after one's name in this context could be interpreted as both respect and playfulness towards Jack Ma, the founder of Alibaba Group. Furthermore, the customer's description of the brand name as 'Must Stay' is a pun that plays on a similar pronunciation for the characters in the real hotel brand. This relaxed and humorous style at the beginning of the narrative sets an approachable tone for readers.

Customers also used another approach to set-the-stage before their subsequent coverage of brand experiences. In this approach, the beginning of the narratives sought to connect with readers on an interpersonal level. For instance:

> "When you were a child, did you always imagine what the world would be like 20 years later? [Did you imagine] flying cars, a 'Dokodemo Door', or others? Although our imaginations have not become a reality yet, the current technology that we use may still give us a futuristic experience. Today, 'Little Yo' would like to share about this high-tech hotel." (Narrative #27)

'Dokodemo Door' is a cultural reference to a magical door in 'Doraemon', a Japanese anime that has grown up with generations of children in Asia. The magical door allows the user to 'pass through' and go anywhere, which connects well with the customer's intention of linking imagination, traveling, and technology in hotels. The customer introduces herself as 'Little Yo' to develop a more relatable personality. This blend of casualness and joviality in the introduction is not uncommon on Xiaohongshu.

In another example, a customer set the tone as it relates to the current pandemic situation. The customer began:

> "This year with the devastating pandemic, how to select a hotel with a peace-of-mind has become a top priority. Today, for the hotel that [I] will suggest to my sisters, you can stay at ease even if it is during the pandemic." (Narrative #23)

This example is straightforward: the customers sought to connect with readers based on an issue that is top-of-mind in hospitality. In doing so, the customer foreshadows the types of affective experiences that guests can expect (e.g., feelings of ease and relief rather than nervousness and anxiety) before progressing to discussions of robotics at the hotel. Overall, the purpose of highlighting these three examples is to show how customers may set a fun, entertaining and relatable tone before progressing into details of their hotel brand experiences. This is quite different from a more structured review site where writers may go straight to the point of what they liked, or complain about what they were unsatisfied with.

Middle: Connecting the four dimensions of hotel brand experiences

After setting the tone, customers progressed towards a more thorough discussion of their hotel brand experiences. Given the length of their narratives, there was ample room to go into details. Their narratives tend to follow a pattern of discussion of brand experiences (see Figure 3).
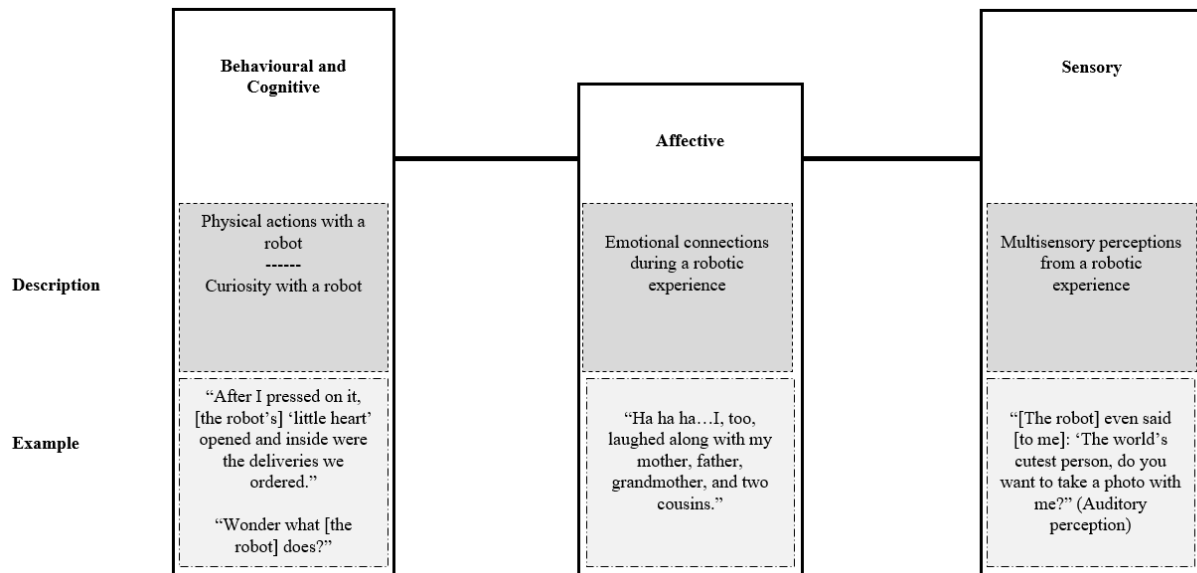
--- Insert Figure 3 here ---

Figure 3. A patterns framework of brand experiences with robotics
Figure 3 Alt Text: A patterns framework of brand experiences with robotics showing that behavioral and cognitive experiences could elicit affective experiences and subsequently, sensory experiences. Affective experiences act as an interface between the behavioural and cognitive dimensions.

As shown in Figure 3, customers tend to write their narratives by first describing their behavioural and cognitive experiences. They would describe 'what they did' (i.e., behavioural actions) or inquire and wonder about 'what a robot could do' (i.e., cognitive curiosity). For instance:

"The cute robot displayed 'open' in two [Chinese] characters. After I pressed on it, its 'little heart' opened and inside were the deliveries we ordered." (Note: the characters 'little heart' in Chinese is a humorous pun to denote both the physical compartment of the robot as well as calling the robot a 'honey'). (Narrative #8)

Many discussions of hotel brand experiences followed this pattern: customers would describe their actions (e.g., press on the robot's screen) to begin their narratives. Other customers would follow a similar pattern, albeit with a reflection of cognitive experiences to arouse a sense of curiosity.

"This smart robot is really interesting and convenient. Wonder what it does? You just need to holler if you want to turn on/off the lights, or open/close the window blinds." (Narrative #26).

Within the patterns of discussion in this framework, behavioural and cognitive experiences were closely associated with each other; that is, feelings of curiosity with a robot spurred behavioural experiences, and vice versa. For instance, after customers "pressed a button" on a robot, they "wondered what would happen". In other words, cognitive and behavioural dimensions went hand-in-hand during customers' experiences. This was particularly the case for individuals who have not had any experience with robotics at hotels. They were indeed genuinely curious (i.e., cognitive) about what happens when they activated or used a robot (e.g., behavioural).

It is important to note, however, that cognitive experiences were more salient with thoughts of curiosity rather than problem solving. Customers indicated that the robots were "easy to use" and they did not express difficulty with access. They did not have to 'solve problems' related to robotic functions (e.g., the delivery robot was straightforward to activate). Consequently, customers did not write much about the challenges they faced, which in turn, limited the kinds of problem solving, intellectual stimulations that are associated with deeper cognitive experiences.

Following an explanation of behavioural and cognitive experiences, customers often interjected their narratives with affective experiences of the emotions they felt. Customers wrote "haha" (Narrative #8), which were repeated multiple times to convey their laughter. They also described their facial expressions at the time, such as "smiling" and "chuckling" (Narrative #15).

Customers did not reflect on hotel brand experiences rigidly; that is, they did not 'completely' write about all their behavioural experiences, and then progress to all of their cognitive, affective, and sensory experiences in discrete narrative segments. Instead, the pattern of discussion for hotel brand experiences was fluid and engaging as customers described their sense of curiosity (e.g., cognitive) followed by their feelings at that immediate moment (e.g., affective) before sometimes returning to discussions of what they did (e.g., behavioural). For instance:

"A little robot delivered items to me! I think this is probably the reason why most people are staying at this hotel. The little robot is so busy. *Ha ha ha.* Everyone on this floor is calling for it. The robot can deliver toothbrush, toothpaste, soap, and other small items. I, too, laughed along with my mother, father, grandmother, and two cousins. *Ha ha ha.*" (Narrative #30; italics added to emphasize affective experiences through laughter).

In the above example, the customer inserted notions of laughter into her narrative. She described her affective experiences with robotics alongside her views (i.e., rationale for why she thought other customers chose this hotel) and behaviours (i.e., calling for the robot to deliver toiletries). This was followed by further acknowledgement of the fun she had with her family. In this regard, affective experiences can act as an interface between behavioural and cognitive experiences, and subsequent sensory experiences as per the framework in Figure 3.

Sensory experiences refer to customers' multisensory perceptions through vision, tactile, hearing, olfaction, and gustation. As per the quotes above, customers reported what they did (i.e., behavioural), how they felt (i.e., affective), and then what they 'saw' (i.e., sensory) when a robot responded. Most of the sensory experiences with robotics were related to vision. For customers, however, perhaps what was more interesting than visual aesthetics were the auditory responses from robots. For instance, one customer noted:

> "[The robot] even said [to me]: 'The world's cutest person, do you want to take a photo with me?" (Narrative #8).

Surprisingly, there were no narratives on olfactory or gustation. Olfactory and gustation refers to the sense of smell and taste respectively, which could represent opportunities for engaging customers with more holistic sensory experiences going forward. For example, there are robotics in food and beverages that prepare simple drinks and ice cream. Although they may be considered quite 'gimmicky' at the onset, these robots have become more commonplace in major retail and shopping centres that are located near hotels. Overall, sensory experiences as written in these micro-stories tend to be more uni- or bi-dimensional (e.g., based on visual or auditory) rather than multi-sensory.

End: An informative and/or humorous conclusion

An ending is crucial for a story. After setting the tone in the beginning and then connecting the four dimensions of hotel brand experiences in the middle, customers often ended by providing an informative or humorous conclusion.

In an informative type of conclusion, customers would conclude by providing sources about the hotel. This could include information such as the location and check-in times. More importantly, customers would provide hints or tips to future guests, such as deals, prices, and 'freebies' that they should expect if they stay there. One customer even warned readers not to fall into a trap by going to the wrong hotel with a name that sounds similar but is completely different in reality. For instance:

> "Tip: this is Hotel xyz 'S' (Train Station East exit), not Hotel xyz (also Train Station East exit). This 'S' makes a huge difference. For friends who want to go there, please do not make the wrong reservation. This was my mistake." (Narrative #25)

In another type of conclusion, customers tried to finish by arousing humour, which is a core feature of narratives in micro-stories (Popova, 2015). For instance, as this customer concluded:

"This is convenient and wonderful hotel experience. Come and quickly become a 'high-ranking' 'garbage' hahaha". (Narrative #10)

In this quote, the term, 'garbage' in the context of the Chinese characters, references an individual who can 'do nothing' or 'be useless'. Furthermore, the customer plays on the oxymoron of 'high-level' and 'garbage' as 'garbage' tends to be viewed as 'useless' and unimportant. By putting these characters together, the customer is using humour to highlight the convenience of the hotel experience as it allows an individual to 'transform into exemplary piece of junk'.

It should be noted that the Chinese characters did not intend to condescend the reader; instead, this type of 'ultimate relaxing experience' has become increasingly sought after giving the reported stresses and responsibilities in daily life. This type of experience could also be particularly relevant to a young Chinese audience as discussions of overworked in overtime hours as continuously surfaced in Chinese social media platforms (Wang, 2021).

Discussion

This study interpreted customers' narratives of hotel robotics with respect to the different dimensions of brand experiences (i.e., sensory, behavioural, affective, and cognitive) via micro-stories from Xiaohongshu, an emerging social platform in China. Micro-stories reflect an important mode to communicate past experiences (Lundqvist et al., 2013), and the narratives were written in an approach and relatable way for readers in the form of descriptive experiences.

The study showed that customers began their micro-stories by setting the tone through an approachable writing style before progressing towards a more thorough discussion of the hotel brand experience in the middle of the micro-story. They often ended their micro-stories with an informative and humorous conclusion. In doing so, this study connected tourism and hospitality research with the literature on micro-stories to understand how customers may form a pattern of discussion in the narratives of robotics and hotel brand experiences.

Theoretical implications

This study provides important theoretical implications for the tourism and marketing literature. It contributes to tourism and hospitality research by presenting a novel framework of pattern sharing for the four dimensions of brand experiences. The framework offers new insights for the literature as existing studies on brand experience dimensions tend to discuss each dimension independently without exploring the patterns among all dimensions (e.g., Chan & Tung, 2019; Nysveen et al., 2018; Ong et al., 2018). In this regard, this study contributes by showing that behavioral and cognitive experiences could elicit affective experiences and subsequently, sensory experiences. Meanwhile, affective experiences act as an interface between the behavioural and cognitive dimensions. The framework of hotel brand experiences presented in this study emphasized the patterns amongst dimensions of brand experiences with corresponding descriptions and examples.

This study further contributes to the literature by highlighting salience associated with the different dimensions of brand experiences. In other words, the study showed that that not all brand experiences dimensions with robotics were emphasized equally by customers. They emphasized

behavioural, affective, and sensory experiences more than cognitive experiences (problem-solving). A possible explanation is that this could be due to the design of robotics. Robots were designed to be easy to use in order to increase user acceptance (Li & Wang, 2021), and hence, customer's brand experiences with robotics did not require much problem-solving skills. For instance, customers did not have much challenge using robots in China when the unmanned hotel was introduced by the Alibaba Group in 2018 (Liu & Zhang, 2021).

Finally, this study contributes to the literature by highlighting how it is common for customers to use micro-stories to convey delightful and humorous narratives (Pabel & Pearce, 2018). Although brand experiences could be positive and negative (Brakus et al., 2009), the study results shows that micro-stories could be used to evoke a greater intensity of readers' positive emotions and tangibilize brand experiences. In other words, enjoyment via interesting content plays an important role in enhancing its readers' involvement thereby enabling readers to connect with the stories of positive hotel brand experiences with robotics. Additionally, customer may elevate recollections of positive memorable experiences as a result of impression management motives from the sharer to the listener (i.e., in this case, from the writer to the reader of the micro-stories) (Tung et al., 2018).

Marketing implications

There are relevant marketing implications from this study. First, this study offers insights into how different perceptions of brand experiences dimensions could influence the marketing strategies of hotel brands. This study found different patterns of sharing as customers did not reflect on all four brand experience dimensions in the same way; hence, marketers need to be cognizant of the target market, where the deployment of robotics in hotels are growing rapidly. Customers in these countries are becoming used to advanced technologies in daily life, and thus cognitive experiences (e.g., problem solving and intellectual stimulation) may be at the forefront of their experiences with robotics. For instance, customers in China are looking forward to the birth of entertaining service robots where they could socialize and interact with that may enhance their experiences (Chen et al., 2022). Furthermore, customers are interested in humanistic behaviors and even displays of emotions in robots, thereby allowing them to differentiate their experiences with a service-oriented robot from a functional-robot. This would allow customers to experience a certain extent of personalization which helps to facilitate a sense of 'warmth' with robots (Chang & Kim, 2022).

Second, marketers could focus on the patterns offered by the framework in this study to elicit more relatable and deeper narratives about the brand experiences offered by their organization to align with their targeted customers. For instance, marketers could take a step-by-step approach to let customers explore and reflect on what they would like to do when they engage with a robot. They could start by triggering actions that customers may be interested in (i.e., engage their behavioural experiences) and then monitor how they react and the senses they perceive (i.e., reflect on customers' affective and sensory experiences). There is no need to always 'wow' customers with sensory-overload at the onset. The key is to enhance customers' brand experience with hotel robotics by showing values that the robotic services offer while ensuring the technology is easy to use from customers' perspective (i.e., minimize negative behavioural experiences).

Third, this study shows that marketers should closely monitor micro-stories because narratives in micro-stories are approachable for potential customers. Narratives are written in detailed and humorous ways, and consist of customers' real-life experiences. Monitoring narratives would be crucial as real experiences are perceived as more authentic from a reader's perspectives than a firm's promotional material (Hong et al., 2021). For instance, hotels are responding on another mobile application, Dianping, in China. Hotel marketers reply to users' posts and in some cases, enquiries from the public. Such practices are noted across hotels regardless of whether they are international or local, chained or independent properties. These interactions could benefit the hotels by establishing a positive image of responsiveness and service quality (Ju et al., 2018). In the future, marketers can monitor Xiaohongshu and Dianping since both are growing in popularity amongst the younger generation.

Limitations and future research

There are limitations and opportunities for future research. The sample was collected from Xiaohongshu in China and the micro-stories were based on Chinese. It is difficult for a study to represent an entire country, and in no way does this study claim to be. This study adopted a qualitative approach that sought to provide an in-depth understanding of hotel brand experiences with robotics, rather than to generalize results for an entire country.

It is also important to acknowledge that online travel communities could be affected by culture and linguistics (Mele et al., 2021). Writing styles in Chinese, for example, could be very different from those written in another language. Future studies could investigate customers' patterns of brand experiences across different languages, which could open interesting new opportunities that further connect humanities with tourism and hospitality research (McKercher & Tung, 2016).

This study sought to understand customers' pattern of discussion in the narratives of robotics and hotel brand experiences. It does not, however, consider how robotics and human staff interactions collectively influence these experiences, which could ultimately affect the careers aspirations of human employees (Tolkach & Tung, 2019). Furthermore, this study did not evaluate the extent to which the dimensions of brand experiences are more salient compared to each other. Future research could conduct comparative analysis to validate the patterns from a scale perspective (Chang et al., 2020). Future studies could also adopt other means such as implicit association tests (Tse & Tung, 2023). The goal is to assess the importance that both writers and readers of micro-stories attribute to each of the four dimensions of hotel brand experiences with robotics.

References

Agapito, D., Mendes, J., & Valle, P. (2013). Exploring the conceptualization of the sensory dimension of tourist experiences. *Journal of Destination Marketing & Management*, 2(2), 62-73.

Ahn, J. & Back, K.-J. (2018). Beyond gambling: mediating roles of brand experience and attitude", *International Journal of Contemporary Hospitality Management*, 30(10), 3026-3039.

Ahn, J., Lee, C. K., Back, K. J., & Schmitt, A. (2019). Brand experiential value for creating integrated resort customers' co-creation behavior. *International Journal of Hospitality Management*, 81, 104-112.

Barber, J. F. (2016). Digital storytelling: New opportunities for humanities scholarship and pedagogy. *Cogent Arts & Humanities*, *3*(1), 1181037.

Barnes, S. J., Mattsson, J., & Sørensen, F. (2014). Destination brand experience and visitor behavior: Testing a scale in the tourism context. *Annals of Tourism Research*, 48, 121-139.

Bergener, J., & Santarius, T. (2021). A pace of life indicator. Development and validation of a General Acceleration Scale. *Time & Society*, 30(3), 273-301.

Botha, M. (2016). Microfiction. In A. Einhaus (Ed.), *The Cambridge Companion to the English Short Story* (Cambridge Companions to Literature, pp. 201-220). Cambridge: Cambridge University Press. https://doi.org/10.1017/CCO9781316018866.016.

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: what is it? How is it measured? Does it affect loyalty?. *Journal of Marketing*, 73(3), 52-68.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77-101.

Chan, A. P. H., & Tung, V. W. S. (2019). Examining the effects of robotic service on brand experience: the moderating role of hotel segment. *Journal of Travel & Tourism Marketing*, 36(4), 458-468.

Chan, J. (2021). *What is Little Red Book (Xiaohongshu) and Why are Global Brands Jumping on it?* Linkfluence. https://www.linkfluence.com/blog/little-red-book-xiaohongshu

Chang, A. Y. P., Li, M., & Vincent, T. (2020). Development and validation of an experience scale for pilgrimage tourists. *Journal of Destination Marketing & Management*, *15*, 100400.

Chang, W., & Kim, K. K. (2022). Appropriate service robots in exchange and communal relationships. *Journal of Business Research*, *141*, 462-474.

Chen, X., Li, Y., Davison, R. M., & Liu, Y. (2021). The impact of imitation on Chinese social commerce buyers' purchase behavior: The moderating role of uncertainty. *International Journal of Information Management*, 56, 102262.

Chen, Y., Xue, T., Tuomi, A., & Wang, Z. (2022). Hotel robots: an exploratory study of Generation Z customers in China. *Tourism Review*, 77(5), 1262-1275.

Cheung, M. C. (2020, January 2). Why Short-Form Video Apps Are So Popular in China. *Insider Intelligence*. https://www.emarketer.com/content/why-short-form-video-apps-are-so-popular-in-china

Cheung, C., Takashima, M., Choi, H., Yang, H., & Tung, V. (2021). The impact of COVID-19 pandemic on the psychological needs of tourists: Implications for the travel and tourism industry. *Journal of Travel & Tourism Marketing*, *38*(2), 155-166.

Clarke, V., & Braun, V. (2014). Thematic analysis. In *Encyclopedia of critical psychology* (pp. 1947-1952). Springer, New York, NY.

Delgosha, M. S., & Hajiheydari, N. (2021). How human users engage with consumer robots? A dual model of psychological ownership and trust to explain post-adoption behaviours. *Computers in Human Behavior*, 117, 106660.

Gentile, C., Spiller, N., & Noci, G. (2007). How to sustain the customer experience:: An overview of experience components that co-create value with the customer. *European management journal*, 25(5), 395-410.

Goldstein, E. (2015). *Cognitive psychology* (4th ed.). Stamford: Cengage Learning.

Hong, J. J., Yang, J., Wooldridge, B. R., & Bhappu, A. D. (2021). Sharing consumers' brand storytelling: influence of consumers' storytelling on brand attitude via emotions and cognitions. *Journal of Product & Brand Management,* 31(2), 265-278.

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

Huang, D., Chen, Q., Huang, J., Kong, S., & Li, Z. (2021). Customer-robot interactions: Understanding customer experience with service robots. *International Journal of Hospitality Management*, 99, 103078.

Hsu, J. (2008, August). *The Secrets of Storytelling: Why We Love a Good Yarn*. Scientific American Mind. https://www.scientificamerican.com/article/the-secrets-of-storytelling/

Hwang, J., Choe, J. Y. J., Kim, H. M., & Kim, J. J. (2021). Human baristas and robot baristas: How does brand experience affect brand satisfaction, brand attitude, brand attachment, and brand loyalty?. *International Journal of Hospitality Management*, 99, 103050.

Hwang, J., Kim, H. M., Joo, K. H., & Kim, J. J. (2022). The antecedents and consequences of brand authenticity in the restaurant industry: robot service employees versus human service employees. *Journal of Travel & Tourism Marketing*, *39*(2), 256-270.

Iglesias, O., Singh, J. J., & Batista-Foguet, J. M. (2011). The role of brand experience and affective commitment in determining brand loyalty. *Journal of brand Management*, 18(8), 570-582.

Ivanov, S., Webster, C., & Garenko, A. (2018). Young Russian adults' attitudes towards the potential use of robots in hotels. *Technology in Society*, 55, 24-32.

Ivanov, S., & Webster, C. (2021). Willingness-to-pay for robot-delivered tourism and hospitality services–an exploratory study. *International Journal of Contemporary Hospitality Management*, 33(11), 3926-3955.

Ju, Y., Back, K. J., Choi, Y., & Lee, J. S. (2019). Exploring Airbnb service quality attributes and their asymmetric effects on customer satisfaction. *International Journal of Hospitality Management*, 77, 342-352.

Kang, J., Manthiou, A., Sumarjan, N., & Tang, L. (2017). An investigation of brand experience on brand attachment, knowledge, and trust in the lodging industry. *Journal of Hospitality Marketing & Management*, 26(1), 1-22.

Khan, I., & Rahman, Z. (2017a). Brand experience anatomy in hotels: an interpretive structural modeling approach. *Cornell Hospitality Quarterly*, 58(2), 165-178.

Khan, I., & Rahman, Z. (2017b). Development of a scale to measure hotel brand experiences. *International Journal of Contemporary Hospitality Management*, 29(1), 268-287.

Kumar, V., & Kaushik, A. K. (2018). Destination brand experience and visitor behavior: The mediating role of destination brand identification. *Journal of Travel & Tourism Marketing*, 35(5), 649-663.

Lee, J., Lee, J., & Feick, L. (2001). The impact of switching costs on the customer satisfaction-loyalty link: mobile phone service in France. *Journal of services marketing*, 15(1), 35-48.

Lee, Y., Lee, S., & Kim, D. Y. (2021). Exploring hotel guests' perceptions of using robot assistants. *Tourism Management Perspectives*, 37, 100781.

Li, Y., & Wang, C. (2021). Effect of customer's perception on service robot acceptance. *International Journal of Consumer Studies*. https://doi.org/10.1111/ijcs.12755

Liu, K. N., & Hu, C. (2021). Investigating the impacts of hotel brand experience on brand loyalty: the mediating role of brand positioning. *International Journal of Hospitality & Tourism Administration*, 1-23.

Liu, K. N., Tsai, T. I., Xiao, Q., & Hu, C. (2021). The impact of experience on brand loyalty: Mediating effect of images of Taiwan hotels. *Journal of China Tourism Research*, 17(3), 395-414.

Liu, Y., & Zhang, N. (2021, March). *Study of Hotel AI Application and Development Trends in 5G Era*. In 2021 4th International Conference on Advanced Electronic Materials, Computers and Software Engineering (AEMCSE) (pp. 1051-1054). IEEE.

Lundqvist, A., Liljander, V., Gummerus, J., & Van Riel, A. (2013). The impact of storytelling on the consumer brand experience: The case of a firm-originated story. *Journal of Brand Management*, 20(4), 283-297.

Manthiou, A., Kang, J., Sumarjan, N., & Tang, L. (2016). The incorporation of consumer experience into the branding process: an investigation of name-brand hotels. *International Journal of Tourism Research*, 18(2), 105-115.

McKercher, B., & Tung, V. (2016). The rise of fractional authors. *Annals of Tourism Research*, *61*, 213-215.

Medina, L. C. (2016). An Abridged City: Santiago, Chile in Micro-Fiction. *Literary Geographies*, *1*(2), 138-154.

Mele, E., Kerkhof, P., & Cantoni, L. (2021). Analyzing cultural tourism promotion on Instagram: a cross-cultural perspective. *Journal of Travel & Tourism Marketing*, *38*(3), 326-340.

Nysveen, H., Oklevik, O., & Pedersen, P.E. (2018). Brand satisfaction: Exploring the role of innovativeness, green image and experience in the hotel sector. *International Journal of Contemporary Hospitality Management*, 30(9), 2908-2924.

Ong, C. H., Lee, H. W., & Ramayah, T. (2018). Impact of brand experience on loyalty. J*ournal of Hospitality Marketing & Management,* 27(7), 755-774.

Pabel, A., & Pearce, P. L. (2018). Selecting humour in tourism settings–A guide for tourism operators. *Tourism Management Perspectives*, *25*, 64-70.

Popova, Y. (2015). *Stories, meaning, and experience*. Abingdon, UK: Routledge.

Qiangua. (2021). 2021 *Xiao Hong Shu Huo Yue Yong Hu Hua Xiang Qu Shi Bao Gao* [2021 Xiaohongshu Active User Trend Report]. https://www.opp2.com/240811.html

Southeast Review. (2021). *Art & Writing Contests*. Florida State University. https://www.southeastreview.org/writing-contests

Teng, H. Y., & Chen, C. Y. (2021). Restaurant Innovativeness and Brand Attachment: The Role of Memorable Brand Experience. *Journal of Hospitality & Tourism Research*, 109634802110420265.

Tolkach, D., & Tung, V. W. S. (2019). Tracing hospitality and tourism graduates' career mobility. *International Journal of Contemporary Hospitality Management*, *31*(10), 4170-4187.

Torres, E. N., Wei, W., Hua, N., & Chen, P. J. (2019). Customer emotions minute by minute: How guests experience different emotions within the same service environment. *International Journal of Hospitality Management*, 77, 128-138.

Touni, R., Kim, W. G., Choi, H. M., & Ali, M. A. (2020). Antecedents and an outcome of customer engagement with hotel brand community on Facebook. *Journal of Hospitality & Tourism Research*, 44(2), 278-299.

Tse, W. T. S., & Tung, V. W. S. (2023). Assessing explicit and implicit stereotypes in tourism: Self-reports and implicit association test. *Journal of sustainable tourism*, *31*(2), 460-482.

Tung, V. W. S., Cheung, C., & Law, R. (2018). Does the listener matter? The effects of capitalization on storytellers' evaluations of travel memories. *Journal of Travel Research*, *57*(8), 1133-1145.

Tung, V. W. S., & Law, R. (2017). The potential for tourism and hospitality experience research in human-robot interactions. International *Journal of Contemporary Hospitality Management*, 29(10), 2498-2513.

Tuomi, A., Tussyadiah, I. P., & Stienmetz, J. (2021). Applications and implications of service robots in hospitality. *Cornell Hospitality Quarterly*, 62(2), 232-247.

Vatan, A., & Dogan, S. (2021). What do hotel employees think about service robots? A qualitative study in Turkey. *Tourism Management Perspectives*, 37, 100775.

Vecchio, G. (2020). Microstories of everyday mobilities and opportunities in Bogotá: A tool for bringing capabilities into urban mobility planning. *Journal of Transport Geography*, 83, 102652.

Wang, Y. (2021, September 9). Goodbye 996? Weibo Discussions on Changes in Overtime Work Culture. *What's on Weibo*. https://www.whatsonweibo.com/goodbye-996-weibo-discussions-on-changes-in-overtime-work-culture/

Xiaohongshu. (2022). About us. Retrieved from https://www.xiaohongshu.com/protocols/about

Ye, B. H., Ye, H., Li, P., & Fong, L. H. N. (2021). The impact of hotel servicescape on customer mindfulness and brand experience: The moderating role of length of stay. *Journal of Hospitality Marketing & Management*, 30(5), 592-610.

Zhou, Y., Kim, W. G., Okumus, B., & Cobanoglu, C. (2021). Understanding online travel communities: a literature review and future research directions in hospitality and tourism. *Journal of Travel & Tourism Marketing*, *38*(2), 194-212.