

# Understanding Chinese tourists' changing shopping experience in Macao: pre and in COVID-19 via user generated content

Xiaojuan Li

*School of Tourism Management, Sun Yat-Sen University, Zhuhai, China*

Yanping Feng

*School of Tourism Management, Macao Institute for Tourism Studies, Macao SAR, China*

Cora Un In Wong

*Faculty of Humanities and Social Sciences, Macao Polytechnic University, Macao SAR, China, and*

Lianping Ren

*School of Tourism Management, Macao Institute for Tourism Studies, Macao SAR, China*

## Abstract

This paper aims to understand Chinese tourists' changing shopping experience in Macao. In scrutinizing reviews posted in the pre-COVID and during COVID eras, the study has identified changing patterns in Chinese tourists' shopping experiences, including increased leisure components while shopping, decreased luxury pursuits and an improved overall leisure and shopping experience because of decreased prices in accommodation and a less crowded retail and leisure environment. An emergent opportunity to provide "retail-tainment" experience is discussed.

**Keywords** Changing Chinese tourist experience, Shopping, Leisure, Retail-tainment, COVID-19, Macao, Online reviews, User-generated content

**Paper type** Research paper



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## Introduction

Shopping is always an indispensable travel component for Chinese tourists. According to UNTWO (2023, p. 19), “China, U.S.A. and Germany remained the world’s top source markets toward the end of the pandemic in 2022.” The contribution of Chinese travelers to global tourism ranked first in the world even during the COVID-19 pandemic. In 2021, Chinese tourists spent about US\$106bn while traveling abroad (Agne, 2023). According to Hung *et al.* (2021), Chinese tourists spent most of their travel expenditure on shopping, and in some countries, the weight can be as heavy as 70.4% of tourists’ total trip expenditure. Lyu *et al.* (2023) concurred and reported that a total of 33% of all luxury goods worldwide were indeed bought by Chinese tourists. Jin *et al.* (2020) also reported that shopping accounted for the highest proportion of Chinese travel expenditure, and their reasons for patronage include gift-giving, lower taxes, re-selling (“daigou service”) and brands’ pricing policies (Hung *et al.*, 2021). All these figures show the importance of Chinese tourist shopping and its contribution to global tourism. Though different countries had different timelines for resuming tourism and called for “an end” to the pandemic, such as some officially ending it in 2022 while other countries only put an end to it in 2023, China nevertheless has been proven to be economically significant to global tourism spending (UNWTO, 2020, 2023) even during the pandemic. Therefore, understanding Chinese tourists’ shopping experiences is important to both global tourism and retailing. In particular, some countries have removed their travel restrictions while China continued its pandemic policies in 2022. It is worthy of attention to investigate how the shopping experience of Chinese tourists might be reshaped during the pandemic period.

Regarding the popular shopping destinations, during the pandemic when Chinese tourists’ mobility was inhibited, Macao was one of the few “lucky” places on earth in which Chinese tourists could still engage in travel and shopping in Macao. According to China Tourism Academy (CTA) (2023), Macao was the most popular (ranked top 1) travel destination for Chinese outbound tourists in the world in 2023, and the proportion of Chinese outbound tourist arrivals was more than 50% (compared to other outbound travel destinations). Besides, mainland China is the biggest tourism market for Macao, which occupied more than 80% of tourism arrivals in 2019 (Macao Statistics and Census Services, 2020). A visitor expenditure survey conducted by MGTO (Macao Government Tourism Office (MGTO), 2021a) showed that shopping expenditure accounted for 55.4% of total visitor spending in 2020, a 9.7% increase over the one in 2019. It is thus apparent that retail business is important not only to the Macao tourism industry, but also to the economy of the city. Though Macao is a popular shopping destination for Chinese tourists, recent studies related to “Chinese tourists” shopping’ were often conducted in other destinations rather than specifically in Macao (Hung *et al.*, 2021; Jin *et al.*, 2020; Abdulsalam and Dahana, 2022). Though a few studies reported how people’s shopping behavior and consumption patterns have changed during the pandemic (Park *et al.*, 2022; Agrawal, 2023; Ruiz and Cruz, 2023), their studies were neither exclusively targeted at Chinese tourists nor conducted in Macao, which was the top-ranked shopping destination for Chinese tourists during the pandemic. To fill this gap, the study attempts to reveal the Chinese tourists’ changing shopping experience before and during COVID-19 via user-generated data. According to Jin *et al.* (2017, p. 124), the tourist shopping experience is defined as “a blend of perceptions of products, services and places in which recreational activity is undertaken and tourists browse, select and purchase goods or services to take home during their travel.” In light of this definition, the research aims to address the following two research questions:

- RQ1. To explore mainland Chinese tourists’ shopping experience in Macao;
- RQ2. To examine if there is a changing structure in Chinese tourists’ shopping experiences during the COVID era. If yes, how has it changed.

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To achieve the stated purposes, the current study adopts a qualitative approach by analyzing 6,616 comments about shopping experiences in Macao that were posted by Chinese tourists on popular social media from April 2017 to April 2022. Analysis of those user-generated data would help illustrate the changing tourists' shopping experiences before and during COVID-19. In particular, the findings provide insights into how the pandemic has influenced the Chinese tourist shopping experience and their emergent preferences. Implications could be of importance to tourism retail operators and other stakeholders for their operational enhancement after the pandemic era.

## Literature review

### *Tourist shopping*

Shopping has been highlighted as a major component of tourism in many studies (Choi *et al.*, 2016; Kinley *et al.*, 2002). It is regarded as one of the most important tourist activities (Jin *et al.*, 2017). For many tourists, a trip wouldn't be complete without shopping (LeHew and Wesley, 2007; Zeinali *et al.*, 2014). Shopping can effectively influence destination choices, lengthen visitors' stays and increase consumption at the destinations (Choi *et al.*, 2016; Wong and Wan, 2013). Moreover, shopping is the major enjoyable leisure activity that accounts for the second-highest travel expense after accommodation (UNWTO, 2019). Many studies reported that travelers spent almost one-third of their overall travel expenses on shopping (LeHew and Wesley, 2007; Turner and Reisinger, 2001). Tourist shopping is conceptualized as a tourist's individual social practice (Jin *et al.*, 2020) and a contemporary leisure activity that is comprised of looking, touching, browsing and buying (Jin *et al.*, 2017). Timothy (2005) categorized tourist shopping into either utilitarian shopping or leisure/hedonic shopping, and each would generate different shopping experiences.

### *Tourist shopping experience*

The tourist shopping experience is defined as a combination of tourist satisfaction or dissatisfaction obtained from the patronage of products and services provided in the shopping environment (Peter and Anandkumar, 2016; Pizam and Ellis, 1999). Having a satisfied shopping experience could strengthen tourists' revisit intention to a destination (Chen *et al.*, 2020). Albayrak *et al.* (2016) indicated that customers' re-patronage behavior was highly associated with their hedonic shopping experiences. The tourist shopping experience entails much more than just purchasing goods. It integrates all four dimensions of the experience economy, including education, esthetic, entertainment and escapism (Albayrak *et al.*, 2020). For example, esthetic attributes such as product display and the lighting in shops play a key role in offering a high-quality shopping experience to tourists (Albayrak *et al.*, 2020; Lyu *et al.*, 2023). According to Jin *et al.* (2017), the shopping experience is composed of a bundle of factors, including shopping activities, perceptions of shopping dimensions, tourist characteristics and interactions with others. Wong and Wan (2013) reported that visitors' shopping experiences were heavily molded by destination-level attributes, including feeling of safety, accessibility, location, cleanliness and the size of a shopping place. Hung *et al.* (2021) suggest that Chinese luxury shoppers have become more sophisticated and have searched for a holistic shopping experience when traveling. An unwelcoming atmosphere may inhibit visitors' visitations and push them away and toward alternative destinations. Christiansen and Snepenger (2002) indicated that tourists' purchase behavior was regarded as one of the consumer responses to their tourist shopping experience.

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### *Changes in tourist shopping under the pandemic*

Tourism is extremely vulnerable to external shocks, such as natural disasters, epidemic sickness and terrorist attacks (Chesney *et al.*, 2011; Schmude *et al.*, 2020). The outbreak of COVID-19 was a major and recent catastrophe that has caused unprecedented damage to the global retail and tourism industries (OECD, 2020; Yiu, 2023). Indeed, it has also caused changes in tourists' travel consumption patterns (Chung-Wei, 2021). For example, Kuo (2021) indicated that the intended traveling time in Taiwan was shortened. Ilgaz *et al.* (2021) expressed that tourists in Turkey paid more attention to the cleanliness and security of tourist attractions and public recreational areas after the pandemic. Their consumption tends to be more budget-cautious, and they enjoy more the use of free-of-charge public facilities. Agrawal (2023) reported that there is a change in consumption patterns during and after COVID-19. Targeted at young consumers, Agrawal reported that young customers made use of shopping activities as a means to reduce their negative emotions generated during COVID-19. They want to stay in retail environments, where they could hang out freely and have more social interactions. In addition, their consumption became more utilitarian-based rather than hedonic-based. Siregar *et al.* (2023) stated similarly that young affluent customers obtained immediate gratification not only from the moment when they shopped but also from entertainment encountered during their shopping experience. Shopping amenities, store attributes, product attributes, safety and staff service were identified as the important factors that could positively contribute to tourists' shopping experiences (Kim *et al.*, 2023; Peter and Anandkumar, 2016; Wu *et al.*, 2014; Zhang *et al.*, 2019).

### *Chinese tourists' outbound shopping experience*

Shopping is important to Chinese tourists. Their economic contribution to worldwide retailing and global tourism has been well documented (Hung *et al.*, 2021). Indeed, shopping has become a must-do activity for Chinese tourists while visiting other countries (Zhu *et al.*, 2016). According to the United Nations World Tourism Organization (2020), Chinese tourists ranked as the world's top spenders, and they contributed to one-fifth of international tourism spending. Therefore, understanding Chinese tourists' shopping phenomenon has become crucial in retailing and tourism studies. Factors that motivate Chinese tourists to do shopping abroad have been identified, including, uniqueness, value for money (Hung *et al.*, 2021), lower prices after tax (Li *et al.*, 2020), high-quality and authentic products, extensive selection, enthusiastic service offerings (Wang *et al.*, 2010), trustworthiness of product quality, the service quality of service providers, availability of the desired products, travel convenience in the destination (Ren and Hung, 2022), social interactions with staff and the shop environment (Lee and Choi, 2020).

According to the World Tourism Cities Federation (2018), shopping venues and destinations also contribute to Chinese tourists' shopping satisfaction. As for shopping venues, Chinese outbound tourists prefer to go to large department stores/shopping malls and duty-free shops for shopping (World Tourism Cities Federation, 2018). Regarding the amenities of those shopping venues, Chinese tourists prefer convenient locations and shopping malls with pleasant atmosphere and clean and safe environment, in addition to basic amenities and facilities (Kinley *et al.*, 2002). While those previous studies are informative, few studies report on how Chinese tourists' shopping experiences have changed during the pandemic. A few exceptions were reported, mostly on online shopping, because of the outbreak of COVID-19 and Chinese tourists' mobility being suspended. For instance, Maltseva and Li (2020) reported that the COVID-19 pandemic has forced the older generation of Chinese customers to adapt to the online shopping environment. Lo *et al.* (2023) reported

similarly that the number of patronages conducted via online shopping platforms increased drastically during the pandemic, but customers by and large still hesitated to engage in luxury shopping via online platforms. In light of this gap and the fact that Chinese tourists are indeed one of the most important tourist shopping groups in the world, this study uses a qualitative approach to obtain an in-depth understanding of the mainland Chinese tourist shopping experience in Macao, as well as how their experience has changed during the pandemic.

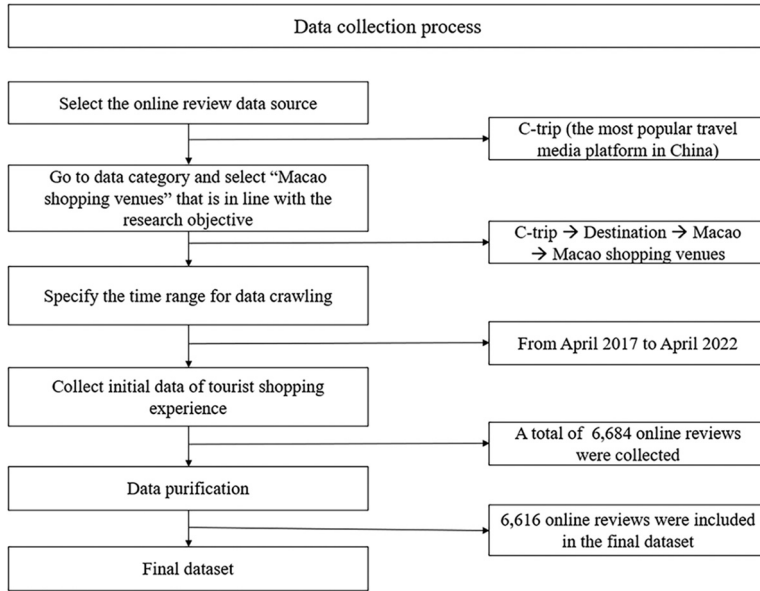
### Methodology

Qualitative research is renowned for dealing with research inquiries that are non-numerical but contextual and emotionally oriented (Dey, 2003). In this study, user-generated content was the main source of data for analysis. The nature of such data is thus sentimental and contextual based. Many previous studies have used online reviews and user-generated data as the main data source, particularly in studies related to destination branding and tourists' perceptions (Lee and Park, 2023; Qi *et al.*, 2018; Wong and Qi, 2017; Wu *et al.*, 2023). Those online reviews are believed to be individuals' self-disclosed inner feelings that are free of commercial meddling. Of course, the influential power of user-generated content varies depending on a number of factors, such as the trustworthiness of social media platforms (Xiang and Gretzel, 2010). User-generated content is, nevertheless, still regarded as a reliable source of data that can be used to learn about the tourist experience (Huang *et al.*, 2021). In particular, many tourists undertake the pre-trip information search by browsing user-generated content. Those information seekers are happy to tap into this "collective intelligence" available on the Web for free (Litvin, Goldsmith and Pan, 2008).

#### *Data collection*

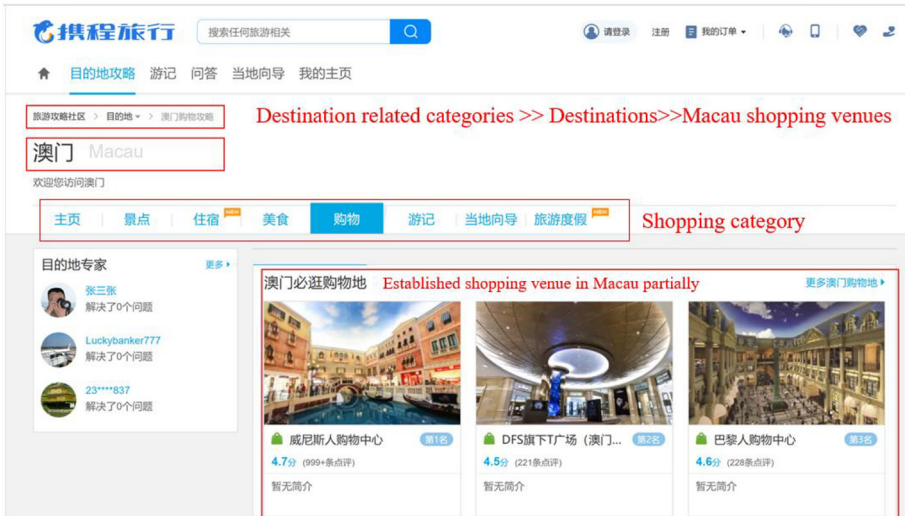
The current study also made use of the user-generated content related to mainland Chinese tourists' online reviews of shopping experiences as the main corpus of data. Content analysis was adopted as the evaluation mechanism grounded in an interpretive paradigm for identifying tourist shopping experiences in Macao during the COVID-19 era. The source is C-Trip.com (also known as Trip). Trip is currently the biggest online travel intermediary in China (Wu *et al.*, 2023). Apart from the travel products that buyers can make bookings directly online, Trip also allows customers to share their experiences online, which makes Trip itself a renowned social media platform for travel tips. Information includes tourists' experiences, evaluations of one's patronage, recommendations of worldwide accommodations, transportation, dining, shopping, etc. (Zhang *et al.*, 2010). Because of the fact that Trip is the largest travel intermediary platform in China with comparatively long years of tourists' reviews available to the public, the data have all been publicized and could be legitimately used for non-commercial purposes. Therefore, the current study chose Trip as the main source of data collection. To illustrate the process of data collection, Figures 1 and 2 show the steps involved when the data crawling was conducted. With the help of Bazhuayu, a Web crawler software, this study collected online reviews of the shopping venues in Macao from C-Trip.com. The online reviews were collected from April 2017 to April 2022. The time period was chosen to cover a 5-year period, including before and during the pandemic. As the authors specified to retain data that were only from the category of "Macao shopping venues" tab, tourists' reviews and comments (see Figure 2) were thus all related to tourists' shopping experience of a particular site. At the initial stage, 6,684 online reviews were collected.

Data purification process was applied to exclude reviews that did not contain sufficient information for analysis. Specifically, reviews with fewer than ten words were excluded



Source: Authors' own work

Figure 1. Data collection process



Source: Authors' own work

Figure 2. Macao shopping venue list showed in C-trip



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from the analysis (Sun *et al.*, 2021). 68 online reviews were excluded because of limited information and content overlapping and cross-checking by the research team members. Eventually, 6,616 online reviews were included in the final data set. Table 1 below shows the details of the online reviews collected.

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*Text cleaning and analysis*

Text cleaning was performed with Python, including tokenization, lowercasing, NLTK stop words and custom stop words (e.g. “also,” “another,” and “without”) (Hardeniya *et al.*, 2016; Perkins, 2010). The cleaned texts were used for further analysis. The researchers then applied Social Network and Semantic Network Analysis of the ROST CM 6, a content mining and analysis software developed by Wuhan University (Liu *et al.*, 2021; Yu and Li, 2020), to analyze the online reviews. The identified high-frequency words were further translated by the research team members and cross-checked among the members. The final translation result achieves 94% agreement. To provide transparency as well as to visualize the results and the co-occurrence relations, the word co-occurrence network was examined via Gephi. Gephi is regarded as one of the leading software for creating and visualizing networks and relations between words (Cherven, 2013). The network usually reflects the connections between nodes (e.g. sub-categories), the connections of which are drawn from co-occurrences of nodes in the same sentence, same paragraph, or same document (Huang *et al.*, 2021). Tables 2–4 present the top 40 high-frequency words of overall shopping experience in pre-COVID and during COVID tourist shopping experiences, respectively.

**Findings**

The above analyses have led to a detailed understanding of the Chinese tourist shopping experience in Macao and how it has changed since the outbreak of the pandemic. Generally, the tourist shopping experience in Macao is blended in their interaction with the integrated resorts, the main hospitality complexes that house gaming, accommodation, food and beverage, retail units and other entertainment provisions and provide a one-stop holiday experience. For many tourists, shopping is one of their leisure activities in the integrated

Shopping centers/ venues	No. of online reviews (pre-COVID, from April 2017 to January 2020)	No. of online reviews (during- COVID, from February 2020 to April 2022)	No. of online reviews (total)
The Venetian	1,827	1,594	3,421
The Parisian	119	804	923
The Londoner	NA (opened in 2021)	210	210
New Yaohan	447	100	547
The Four Seasons	325	140	465
One Central Macao	34	10	44
The Galaxy integrated resort	274	17	291
Guanye Street	275	263	538
Studio City	8	4	12
City of Dreams	100	10	110
Cotai Strip	102	24	126
Total	3,480	3,136	6,616

**Table 1.**  
Included online  
reviews on shopping  
experience in Macao

**Source:** Authors’ own work

**Table 2.**  
Top 40 high-  
frequency words of  
the overall tourist  
shopping experience

Rank	High frequency	Count	Rank	High frequency	Count
1	Macao	2,162	21	Guest room	364
2	Shopping	1,649	22	Free of charge	363
3	The Venetian	1,467	23	Luxury shopping	347
4	Hotel	1,449	24	Variety	292
5	Environment	791	25	Tourist	292
6	Service	790	26	Architecture	271
7	The Parisian	723	27	Choice	269
8	Convenience	713	28	Attitude	263
9	Shopping center	691	29	COVID-19	253
10	Studio City	645	30	The Four Seasons	247
11	Golden Reel	619	31	Artificial sky	243
12	Gondola canal	524	32	Hong Kong	230
13	Inexpensive	502	33	Check-in	223
14	Full range	495	34	Attraction	214
15	Experience	457	35	Indoor	206
16	Time	442	36	Sands Macao	204
17	Delicacy	429	37	Integrated resort	204
18	Night	419	38	Casino	200
19	Distinctiveness	380	39	Eiffel Tower	159
20	Photo taking	365	40	The Londoner	156

Source: Authors' own work

Rank	High frequency	Count	Rank	High frequency	Count
1	Macao	1,348	21	Variety	239
2	Shopping	1,283	22	Artificial sky	230
3	The Venetian	1,105	23	Luxury shopping	226
4	Hotel	927	24	Tourist	193
5	Golden Reel	597	25	Excited	193
6	Environment	593	26	Night view	189
7	Studio City	576	27	Architecture	189
8	Big brands	570	28	The Parisian	185
9	Gondola canal	543	29	Hong Kong	180
10	Shopping center	542	30	Attitude	180
11	Place	511	31	Entertainment	179
12	Convenience	510	32	Indoor	168
13	Service	500	33	The Galaxy	152
14	Inexpensive	405	34	Integrated resort	152
15	Full range	374	35	Guest room	151
16	Experience	358	36	The Four Seasons	148
17	Time	345	37	Attraction	144
18	Delicacy	301	38	Casino	133
19	Distinctiveness	295	39	Sands Macao	121
20	Spider-Man	279	40	Paradise	100

**Table 3.**  
Top 40 high-  
frequency words in  
pre-COVID

Source: Authors' own work



**Table 4.**  
Top 40 high-  
frequency words  
during COVID

Rank	High frequency	Count	Rank	High frequency	Count
1	Macao	1,078	21	Night view	165
2	The Venetian	778	22	Inexpensive	159
3	The Parisian	607	23	Full range	158
4	Shopping	587	24	Choice	158
5	Guest room	456	26	The Londoner	156
6	Eiffel Tower	339	25	Photo taking	151
7	Convenience	310	27	Artificial sky	143
8	Value	291	28	Attitude	125
9	Shopping center	281	29	Favorable	121
10	Account	263	30	Integrated resort	118
11	COVID-19	262	31	Walking around	115
12	Environment	241	32	Facility	115
13	Free of charge	215	33	Square	110
14	Gondola canal	207	34	Cosmetics	95
15	The Four Seasons	207	35	Attraction	95
16	Casino	200	36	Comfortable	95
17	Check-in	189	37	Beautiful	94
18	Delicacy	184	38	Less crowded	92
19	Experience	181	39	Lobby	88
20	Alternative	167	40	Snacks	86

**Source:** Authors' own work

resorts. The retail provisions and service quality have also attracted comments. In addition, the pandemic has changed the tourist shopping experience in a few ways, namely:

- A heavier weight is put on the leisure component along their shopping journeys.
- A decrease in the patronage of luxury shopping items, but more time is spent on those diversified peripheral attractions.

The following presents the main findings via the presentations of high-frequency words and their co-occurrence maps.

#### *Overall tourist shopping experience*

Regarding the overall shopping experience, it is found that the tourist shopping experience in Macao almost exclusively took place in those integrated resorts. The word frequency result shows that “The Venetian,” “The Parisian” and “Integrated resort” were the top 40 high-frequency words (see [Table 2](#)), which suggests that the Venetian and the Parisian were among the most popular venues. Moreover, “Shopping” had co-occurrences with “The Venetian,” “Shopping center,” “Environment,” “Integrated resort,” “The Parisian,” “Hotel,” “The Four Seasons” and “Convenience.” The distinct themes in the integrated resorts were related to “Architecture,” “Beautiful,” “Distinctive” sceneries, the “Environment,” the “Gondola Canal” and the “Artificial sky” in the Venetian Hotel, which were impressive to the tourists and successful in providing the tourists with sensory-rich shopping journeys. In addition, the tourists enjoyed the comfort and convenience of shopping in an “Indoor” environment where there was a “Full range” of products. A level of “Luxury” was appreciated, with all “Big brands” available within the same venue. Regarding the shopping items, tourists would apply “Shopping paradise,” “Have everything that one expected” and “Full range” to describe the product varieties and the ensuing shopping experience. Some tourists enjoyed the “value” that

was derived from tax-free shopping in Macao. The word “delicacy” also appeared in the top 40 list, which is a reflection that, while tourists engaged in shopping, they viewed the various food delicacies in Macao as another tourist magnet of the city, given the fact that Macao bears the name of “UNESCO Creative City of Gastronomy.” Additionally, it seems that tourists liked to compare their experience in Macao with the one they had in Hong Kong, especially from the reviews posted before the pandemic. Below quotes are typical examples:

The Canal Shopping Center (in The Venetian) is the most beautiful and artistic shopping mall. Shopping here has extra enjoyment, which comes from the spacious, luxurious, and palace-like environment. It is in fact more convenient and comfortable to do shopping here than it is in Hong Kong. Hong Kong has too many people [...] the Venetian offers more discount than the Harbor City in Hong Kong. Plus, the Macao Patacas is lower than Hong Kong dollar, better value [...] When you are tired from shopping, you can simply go downstairs and play a few games to rest. . . (V24).

There are all brands in the resort. There are many kinds of cosmetics, clothes, shoes for you to choose from. I feel that the price is lower than the cosmetics I bought in Hong Kong before. The shopping environment is also good, the staff are also friendly, it is worth a visit (V67).

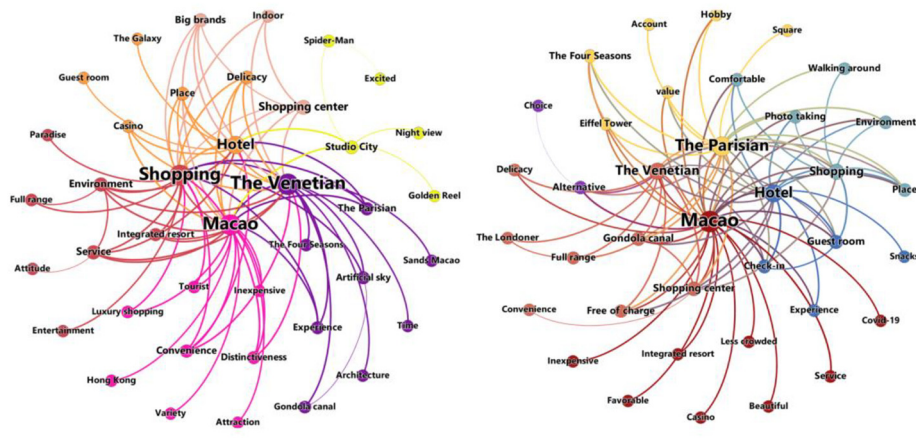
#### *Tourist shopping experience change in pre-COVID versus during COVID*

As for the tourist shopping experience in the pre-COVID era, entertainment and leisure activities formed the core part of tourist shopping experience in Macao. Based on the word co-occurrence result, it is found that “Entertainment” co-appears with “Shopping” and locates within the same group. In addition, “Golden Reel,” “Spider-man,” “Night view” and “Excited” co-occur with “Studio City” (see [Figures 3](#) and [4](#)). The “Golden Reel” refers to the world’s first and highest Ferris wheel, which is one of the landmarks of Macao. The “Spider-man” represents the animation image, and his sculpture has attracted many tourists and fans to take photos. Tourists can enjoy not only the “Big brands” shopping facilities but also experience the “Excited” entertainment activities in those shopping venues. Besides, in the “Shopping” group, it also includes “Integrated resort,” “Service,” “Environment,” “Attitude,” “Full range” and “Paradise” elements. All these keywords contribute to the shopping “Paradise” image of Macao.

Focusing on the reviews posted after 2020, integrated resorts blended with shopping are still the main theme. A total of 3/5 of those high-frequency words appeared in the top frequency list of overall tourist shopping experiences remained on the COVID top list. Moreover, the top high-frequency words, including “Hotel,” “Shopping,” “The Parisian” and “The Venetian,” co-appeared with “Integrated resort,” which is similar to the word co-occurrence result of the overall tourist experience (see [Figure 3](#)). Tourists continued to indicate that their sensorial experience was related to the facilities within those integrated resorts. This result highlights that the comprehensive offerings of the integrated resorts make considerable impacts on the tourist experience in both pre- and during COVID eras (see [Tables 3](#) and [4](#) and [Figure 4](#)).

In addition, there are more words related to leisure activities included in the top 40 frequency word list, including “Photo taking,” “Night view,” “Walking around,” “Comfortable” and “Less crowded.” All these lend support to the claim that the leisure component is gaining more importance in Chinese tourists’ shopping journeys. Both the high-frequency word list and the co-occurrence network map show an increased emphasis on “hotels.” Hotels in Macao are not only places to sleep but also attractions in those integrated resorts. The hotel rooms had been much more expensive in the pre-COVID era, but during the pandemic period, the rooms were sold at a much lower rate, in an attempt to attract Chinese tourists to stay for more nights. Their longer





**Figure 4.** Pre-COVID tourist shopping experience vs changed experience during COVID

Source: Authors' own work

because of travel restrictions, tourists' mobility was strictly prohibited, and therefore, big spenders from China might not be able to visit Macao easily. Second, the pessimistic economic situation further intensified the situation that tourists might not have strong confidence to engage in luxury shopping in Macao as much as they did in the pre-COVID era. This money-caution issue is evidenced in words such as "free-of-charge" being ranked in the top 40 list of high-frequency words. The finding implicitly suggests that the tourists enjoyed the free services provided at those shopping premises, including the free shuttle bus, free coupons and free trials offered. Moreover, the word "Value" was ranked as the top 8 high-frequency word during the COVID era, suggesting that tourists cared more about the "value for money" issue during the COVID era.

It is interesting to note that being "Less crowded" was included in the "during-COVID" table and was appreciated by the tourists as a merit to visit Macao during the pandemic. Although Macao has done well in coping with the challenges during COVID-19, the city has attracted much fewer tourists. According to the [Macao Government Tourism Office \(MGTO\) \(2021b\)](#), because of the pandemic situation, the number of tourists dropped by 85% and 80% in 2020 and 2021, respectively, as compared to the figure in 2019. The city has been much less crowded in the past two years. This has improved the overall tourist experience. Apparently, in terms of resource allocation, more resources and personal attention could be given to individual tourists if each popular shopping premise received 80% or less tourists during the pandemic period. The finding as such is in line with some previous studies that emphasized the importance of retailscapes and shopping environments ([Wong and Wan, 2013](#); [Hung et al., 2021](#); [Lyu et al., 2023](#)). The following quote is illustrative to showcase the fact that "being less crowded" was commended by the tourists. In particular, it highlights the fact that when tourists enjoy the freedom and the space of the shopping premises better, they themselves volunteer to promote the destination from their own tourist's gaze. They themselves become the promotional markers of Macao, which is beneficial to the destination as it enriches the "collective intelligence and travel memories" related to this cultural city.

Macao is a destination where you can have different experience every time. Everyone here was friendly. I was quite satisfied with the services that provided by the hotels [...] Due to the COVID-19 situation, there were not many tourists, the shopping environment was not very crowded, which

made the shopping experience very enjoyable! You can enjoy taking photos freely on the Guanye Street (RUA DO CUNHA, Portuguese, the Street used to be filled with tourists in the pre-COVID period (P67).

### Discussion and conclusion

This study examined Chinese tourists' shopping experience in Macao and how the focus of their shopping experience has changed during COVID-19 era via a content analysis of 6,616 online reviews. Frequency analyses and network analyses revealed interesting insights. Taking all the data into consideration, the result reveals a few themes, including integrated resorts, leisure-blended shopping experience, sensorially rich journeys and quality shopping outcomes. The fact that the retail outlets are located in integrated resorts where manmade architectural and design themes and entertainment opportunities abound enhances tourists' sensorial and leisure experiences. This result corroborates [Chen \*et al.\* \(2022\)](#) argument that tourists explore destinations and form destination images partly through shopping in the destination. In this particular case, the images that the tourists walk away with are associated with man-made attractions instead of the historical and cultural resources of a destination. In the current study, it is the integrated resorts, the design features, the luxury amenities, hotels and attractions that are remembered by the tourists, and they posted their memories online. This corroborates [Sun \*et al.\*'s \(2021\)](#) finding that the pseudo-establishments in Macao are successful in providing a positive tourist experience. In addition, the upscale retail offerings and the consistently good service are still satisfactory to Chinese tourists. At the product and service level, the findings show that Chinese tourists enjoy the "full range," "variety," "service" and "value" aspects of shopping in Macao, as it offers a variety of products and good service at each store. This finding is in line with some previous studies, such as [Wong \(2013\)](#), [Wong and Law \(2003\)](#) and [Wong and Wan \(2013\)](#)'s study, which found that shopping or service environment and the variety of goods were the important attributes that contributed to tourists' shopping experience and satisfaction.

Echoing recent studies such as [Mirzaei \*et al.\* \(2021\)](#), the COVID-19 pandemic has been a powerful change agent, transforming tourists' travel experiences. The current study has identified a few changing patterns, including:

- increased leisure components;
- decreased luxury pursuits;
- changed destination mix choice; and
- improved overall leisure and shopping experience because of the discounted price of accommodation as well as the less crowded retail and leisure environment.

As influenced by the pandemic period, tourists' activities were limited to a regional level ([Miao, Im, So, and Cao, 2022](#)). Tourists tend to undertake travel activities within the neighboring cities or on a local scale. Therefore, a good trip in which tourists can have a holistic shopping experience embedded with a variety of recreational activities is deemed to be ideal and the most wanted, as evidenced in tourists' comments. Moreover, quality products with discounted prices became more attractive as tourists became more financially cautious during the pandemic ([Kuo, 2021](#)). Desire to patronize luxury products declined, while tourists' interests in leisure activities such as taking photos with friends, walking around for "window shopping" and enjoying night views have gained heavier weight and become more influential to the overall tourists' shopping experience. Findings as such shed light on the importance of providing a holistic shopping experience to tourists, which should embrace escapism, education, entertainment and leisure activities. In other words, perhaps



pure shopping *per se* is no longer sufficient. Having spacious spaces for tourists to walk around, amiable places to take nice photos, complimentary services and a welcoming atmosphere, for instance, have all become part of the emerging and wanted shopping experience during the pandemic period. The identified changing structure of the shopping experience thus opens a future research avenue for scholars to assess the roles of pure shopping and other recreational activities and their impacts on tourists' overall shopping experience.

As local authorities have been working hard on diversifying Macao's economy via different forms of tourism, the findings of the current research shed light on the development of retail tourism by illuminating the changing shopping experiences of the dominant tourism market in Macao. In particular, the provision of shopping servicescapes has been found to be important to mainland Chinese tourists who enjoy their shopping service encounters more than engaging in pure shopping at retail shops. In other words, while shopping within those integrated resorts continues during the COVID era, tourists' preference and wants of the service offerings have been slightly modified. It is the blended experience between leisure entertainment and shopping that attracts the tourists in which a sense of retail-tainment is sought. Industry suppliers should therefore focus more on creating shopping experiences that could address the convergence of leisure and entertainment opportunities. The retail-tainment environment created could become a unique selling point of the retail industry in Macao and thus help diversify the economy of the city (Macao Government Tourism Office (MGTO), 2021a). In addition, the current research is one of the few recent studies to identify the changing shopping experiences of Chinese tourists in those integrated resorts after COVID-19. Findings shed light on the non-shopping elements that are wanted by the Chinese tourists as inputs to be embedded with their holistic shopping experience during the unprecedentedly challenging period. Given the fact that Chinese tourists are regarded as the most cardinal source of the recovery of global tourism (McKinsey and Company, 2023; Xinhuanet, 2023; UNWTO, 2023), the changing focus of their shopping experience as reported in the current study might serve as a good reference for future research.

## References

- Abdulsalam, M. and Dahana, W.D. (2022), "Influence of product involvement on tourist shopping behavior: the mediating role of place attachment, satisfaction, and visit frequency", *Journal of International Consumer Marketing*, Vol. 34 No. 5, pp. 552-566.
- Agne, B. (2023), "International tourism spending of Chinese tourists 2008-2021", statista, available at: [www.statista.com/statistics/249702/international-tourism-expenditure-of-chinese-tourists/](http://www.statista.com/statistics/249702/international-tourism-expenditure-of-chinese-tourists/)
- Agrawal, D.K. (2023), "Covid-19-induced shopping behavioural shifts justifying pandemic as 'defining moment' for generation Z", *International Journal of Retail and Distribution Management*, Vol. 51 No. 5, pp. 611-628.
- Albayrak, T., Caber, M. and Çömen, N. (2016), "Tourist shopping: the relationships among shopping attributes, shopping value, and behavioral intention", *Tourism Management Perspectives*, Vol. 18, pp. 98-106.
- Albayrak, T., Güzel, Ö., Caber, M., Kılıçarslan, Ö., Dursun Cengizci, A. and Güven, A. (2020), "How does perceived crowding moderate tourist shopping experience and satisfaction relationship?", *International Journal of Tourism Cities*, Vol. 7 No. 1, pp. 46-62, doi: [10.1108/IJTC-02-2020-0028](https://doi.org/10.1108/IJTC-02-2020-0028).
- Chen, P.-J., Ren, L., Li, X. and Yang, F.X. (2022), "Advances in tourism behavior and retailing introduction to a special issue in journal of global scholars of marketing science (JGSMS)", *Journal of Global Scholars of Marketing Science*, Vol. 32 No. 1, pp. 1-15, doi: [10.1080/21639159.2020.1808854](https://doi.org/10.1080/21639159.2020.1808854).



- Chen, X., Cheng, Z.F. and Kim, G.B. (2020), "Make it memorable: tourism experience, fun, recommendation and revisit intentions of Chinese outbound tourists", *Sustainability*, Vol. 12 No. 5, p. 1904.
- Cherven, K. (2013), *Network Graph Analysis and Visualization with Gephi*, Packt Publishing.
- Chesney, M., Reshetar, G. and Karaman, M. (2011), "The impact of terrorism on financial markets: an empirical study", *Journal of Banking and Finance*, Vol. 35 No. 2, pp. 253-267.
- China Tourism Academy (CTA) (2023), "Big data report on outbound tourism in the first half of 2023", China Tourism Academy, available at: [www.ctaweb.org.cn/cta/gzdt/202308/d08d3bea0fbc4af99ac9873a5560a398.shtml](http://www.ctaweb.org.cn/cta/gzdt/202308/d08d3bea0fbc4af99ac9873a5560a398.shtml)
- Choi, M.J., Heo, C.Y. and Law, R. (2016), "Progress in shopping tourism", *Journal of Travel and Tourism Marketing*, Vol. 33 No. sup1, pp. 1-24, doi: [10.1080/10548408.2014.969393](https://doi.org/10.1080/10548408.2014.969393).
- Christiansen, T. and Snepenger, D.J. (2002), "Is it the mood or the mall that encourages tourists to shop", *Journal of Shopping Center Research*, Vol. 9 No. 1, pp. 7-26.
- Chung-Wei, K. (2021), "Can we return to our normal life when the pandemic is under control? A preliminary study on the influence of covid-19 on the tourism characteristics of Taiwan", *Sustainability*, Vol. 13 No. 17, p. 9589.
- Dey, I. (2003), *Qualitative Data Analysis: A User Friendly Guide for Social Scientists*, Routledge.
- Hardeniya, N., Perkins, J., Chopra, D., Joshi, N. and Mathur, I. (2016), *Natural Language Processing: python and NLTK*, Packt Publishing.
- Huang, D., Chen, Q., Huang, J., Kong, S. and Li, Z. (2021), "Customer-robot interactions: understanding customer experience with service robots", *International Journal of Hospitality Management*, Vol. 99, p. 103078.
- Hung, K., Ren, L. and Qiu, H. (2021), "Luxury shopping abroad: what do Chinese tourists look for?", *Tourism Management*, Vol. 82, p. 104182, doi: [10.1016/j.tourman.2020.104182](https://doi.org/10.1016/j.tourman.2020.104182).
- Ilgaz, B., Dundar, Y., Silik, C.E. and Atalay Oral, M. (2021), "The impact of the covid-19 outbreak on local tourist behavior in Antalya", *Turkey. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 21 No. 1, pp. 391-404.
- Jin, H., Moscardo, G. and Murphy, L. (2017), "Making sense of tourist shopping research: a critical review", *Tourism Management*, Vol. 62, pp. 120-134, doi: [10.1016/j.tourman.2017.03.027](https://doi.org/10.1016/j.tourman.2017.03.027).
- Jin, H., Moscardo, G. and Murphy, L. (2020), "Exploring Chinese outbound tourist shopping: a social practice framework", *Journal of Travel Research*, Vol. 59 No. 1, pp. 156-172, doi: [10.1177/0047287519826303](https://doi.org/10.1177/0047287519826303).
- Kim, G., Duffy, L.N. and Moore, D. (2023), "Importance of residents' perception of tourists in establishing a reciprocal resident-tourist relationship: an application of tourist attractiveness", *Tourism Management*, Vol. 94, p. 104632.
- Kinley, T., Kim, Y.-K. and Forney, J. (2002), "Tourist-destination shopping center: an importance performance analysis of attributes", *Journal of Shopping Center Research*, Vol. 9 No. 1, pp. 51-72.
- Kuo, C.-W. (2021), "Can we return to our normal life when the pandemic is under control? A preliminary study on the influence of covid-19 on the tourism characteristics of Taiwan", *Sustainability*, Vol. 13 No. 17, p. 9589, doi: [10.3390/su13179589](https://doi.org/10.3390/su13179589).
- Lee, J.S. and Park, S. (2023), "A cross-cultural anatomy of destination image: an application of mixed-methods of UGC and survey", *Tourism Management*, Vol. 98, p. 104746.
- Lee, J.-S. and Choi, M. (2020), "Examining the asymmetric effect of multi-shopping tourism attributes on overall shopping destination satisfaction", *Journal of Travel Research*, Vol. 59 No. 2, pp. 295-314, doi: [10.1177/0047287519832373](https://doi.org/10.1177/0047287519832373).
- LeHew, M.L.A. and Wesley, S.C. (2007), "Tourist shoppers' satisfaction with regional shopping mall experiences", *International Journal of Culture, Tourism and Hospitality Research*, Vol. 1 No. 1, pp. 82-96, doi: [10.1108/17506180710729628](https://doi.org/10.1108/17506180710729628).

- Li, C.S., Zhang, C.X., Chen, X. and Wu, M.S.S. (2020), "Luxury shopping tourism: views from Chinese post-1990s female tourists", *Tourism Review*, Vol. 76 No. 2, pp. 427-438, doi: [10.1108/TR-08-2019-0335](https://doi.org/10.1108/TR-08-2019-0335).
- Litvin, S.W., Goldsmith, R.E. and Pan, B. (2008), "Electronic word-of-mouth in hospitality and tourism management", *Tourism Management*, Vol. 29 No. 3, pp. 458-468. 2008
- Liu, Y., Yang, Q. and Yuan, J. (2021), "An empirical study on marketing strategy of Shenzhen coastal tourism resort based on SWOT and ROST CM6 text analysis", 2021 International Conference on Education, Information Management and Service Science (EIMSS), pp. 483-489, IEEE.
- Lo, A.S.S., Wong, C.U.I. and Ren, L. (2023), "Impeding factors of online shopping and their associated products", *Journal of Quality Assurance in Hospitality and Tourism*, doi: [10.1080/1528008X.2023.2231639](https://doi.org/10.1080/1528008X.2023.2231639).
- Lyu, L., Wong, C.U.I., Li, Z. and Ren, L. (2023), "Scrutinizing the effects of pop-up stores' retailscape on young Chinese tourists' emotion and patronage intention", *Young Consumers*, doi: [10.1108/YC-05-2023-1743](https://doi.org/10.1108/YC-05-2023-1743).
- McKinsey and Company (2023), "Outlook for China tourism 2023: light at the end of the tunnel", available at: [www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/outlook-for-china-tourism-2023-light-at-the-end-of-the-tunnel](https://www.mckinsey.com/industries/travel-logistics-and-infrastructure/our-insights/outlook-for-china-tourism-2023-light-at-the-end-of-the-tunnel) (accessed on 16 December 2023).
- Macao Government Tourism Office (MGTO) (2021a), "Macao travel and tourism statistics", available at: <https://dataplus.macaotourism.gov.mo/Publication/StatisticalTables?lang=T>
- Macao Government Tourism Office (MGTO) (2021b), "Macao tourism industry development master plan review study", available at: [https://masterplan.macaotourism.gov.mo/2021/index\\_en.html](https://masterplan.macaotourism.gov.mo/2021/index_en.html)
- Maltseva, Y.A. and Li, H. (2020), "Transformation of Chinese tourists consumer behavior as a consequence of the Covid-19 pandemic", *Advances in Social Sciences, Education and Humanities Research*, Vol. 486, pp. 284-288.
- Miao, L., Im, J., So, K.K.F. and Cao, Y. (2022), "Post-pandemic and post-traumatic tourism behavior", *Annals of Tourism Research*, Vol. 95, p. 103410.
- Mirzaei, R., Sadin, M. and Pedram, M. (2021), "Tourism and covid-19: changes in travel patterns and tourists' behavior in Iran", *Journal of Tourism Futures*, doi: [10.1108/JTF-01-2021-0017](https://doi.org/10.1108/JTF-01-2021-0017).
- OECD (2020), *Rebuilding Tourism for the Future: COVID-19 Policy Responses and Recovery*, OECD Publishing.
- Park, I., Lee, J., Lee, D., Lee, C. and Chung, W.Y. (2022), "Changes in consumption patterns during the COVID-19 pandemic: analyzing the revenge spending motivations of different emotional groups", *Journal of Retailing and Consumer Services*, Vol. 65, p. 102874.
- Perkins, J. (2010), "Python text processing with NLTK 2.0 cookbook", *PACKT Publishing*.
- Peter, S. and Anandkumar, V. (2016), "Deconstructing the shopping experience of tourists to the Dubai shopping festival", *Cogent Business and Management*, Vol. 3 No. 1, p. 1199109.
- Pizam, A. and Ellis, T. (1999), "Customer satisfaction and its measurement in hospitality enterprises", *International Journal of Contemporary Hospitality Management*, Vol. 11 No. 7, doi: [10.1108/09596119910293231](https://doi.org/10.1108/09596119910293231).
- Qi, S., Wong, C.U.I., Chen, N., Rong, J. and Du, J. (2018), "Profiling Macau cultural tourists by using user-generated content from online social media", *Information Technology and Tourism*, Vol. 20 No. 1-4, pp. 217-236.
- Ren, L. and Hung, K. (2022), "Chinese tourists and shopping", In *Encyclopedia of Tourism Management and Marketing*. Edward Elgar Publishing, available at: [www.elgaronline.com/view/nlm-book/9781800377479/b-9781800377486.chinese.tourists.shopping.xml](https://www.elgaronline.com/view/nlm-book/9781800377479/b-9781800377486.chinese.tourists.shopping.xml)
- Ruiz, C.D. and Cruz, A.G.B. (2023), "Unconventional luxury brand collaborations: a new form of luxury consumption among young adults in China", *International Marketing Review*, Vol. 40 No. 7, pp. 1-21.

- Schmude, J., Zavareh, S., Schwaiger, K.M. and Karl, M. (2020), "Micro-level assessment of regional and local disaster impacts in tourist destinations", *Tourism in Changing Natural Environments*, pp. 98-116, Routledge.
- Siregar, Y., Kent, A., Peirson-Smith, A. and Guan, C. (2023), "Disrupting the fashion retail journey: social media and GenZ's fashion consumption", *International Journal of Retail and Distribution Management*, Vol. 51 No. 7, pp. 862-875, doi: [10.1108/IJRDM-01-2022-0002](https://doi.org/10.1108/IJRDM-01-2022-0002).
- Sun, J., Chen, P.J., Ren, L., Shih, E.H.W., Ma, C., Wang, H. and Ha, N.H. (2021), "Place attachment to pseudo establishments: an application of the stimulus-organism-response paradigm to themed hotels", *Journal of Business Research*, Vol. 129, pp. 484-494.
- Timothy, D.J. (2005), "Shopping tourism, retailing and leisure. In shopping tourism, retailing and leisure", Channel View Publications, available at: [www.degruyter.com/document/doi/10.21832/9781873150610/html](http://www.degruyter.com/document/doi/10.21832/9781873150610/html)
- Turner, L.W. and Reisinger, Y. (2001), "Shopping satisfaction for domestic tourists", *Journal of Retailing and Consumer Services*, Vol. 8 No. 1, pp. 15-27.
- United Nations World Tourism Organization (2020), "International tourism highlights", 2020 Edition (p. 24). UNWTO, available at: <https://trз.subu.edu.tr/sites/trз.subu.edu.tr/files/2021-04/UNWTO%202020%20Edition.pdf>
- UNWTO (2023), "UNWTO looks to 're-write tourism history' at official re-opening of China", available at: [www.unwto.org/news/unwto-looks-to-re-write-tourism-history-at-official-re-opening-of-china](http://www.unwto.org/news/unwto-looks-to-re-write-tourism-history-at-official-re-opening-of-china) (accessed on 16 December 2023).
- UNWTO, W. (2019), *International Tourism Highlights*, 2019 edition. World Tourism.
- Wang, Y.J., Doss, S.K., Guo, C. and Li, W. (2010), "An investigation of Chinese consumers' outshopping motives from a culture perspective: implications for retail and distribution", *International Journal of Retail and Distribution Management*.
- Wong, I.K.A. (2013), "Mainland Chinese shopping preferences and service perceptions in the Asian gaming destination of Macau", *Journal of Vacation Marketing*, Vol. 19 No. 3, pp. 239-251, doi: [10.1177/1356766712459737](https://doi.org/10.1177/1356766712459737).
- Wong, J. and Law, R. (2003), "Difference in shopping satisfaction levels: a study of tourists in Hong Kong", *Tourism Management*, Vol. 24 No. 4, pp. 401-410, doi: [10.1016/S0261-5177\(02\)00114-0](https://doi.org/10.1016/S0261-5177(02)00114-0).
- Wong, I.A. and Wan, Y.K.P. (2013), "A systematic approach to scale development in tourist shopping satisfaction: linking destination attributes and shopping experience", *Journal of Travel Research*, Vol. 52 No. 1, pp. 29-41, doi: [10.1177/0047287512457263](https://doi.org/10.1177/0047287512457263).
- Wong, C.U.I. and Qi, S.S. (2017), "Tracking the evolution of a destination's image by text-mining online reviews - the case of Macau", *Tourism Management Perspectives*, Vol. 23, pp. 19-29.
- World Tourism Cities Federation (2018), "Market research - report on Chinese outbound tourist (city) consumption (2017—2018)", available at: [www.wtcf.org.cn/uploadfile/2018/0913/20180913025210427.pdf](http://www.wtcf.org.cn/uploadfile/2018/0913/20180913025210427.pdf)
- Wu, M.Y., Wall, G. and Pearce, P.L. (2014), "Shopping experiences: international tourists in Beijing's silk market", *Tourism Management*, Vol. 41, pp. 96-106.
- Wu, J., Yang, T., Zhou, Z. and Zhao, N. (2023), "Consumers' affective needs matter: open innovation through mining luxury hotels' online reviews", *International Journal of Hospitality Management*, Vol. 114, p. 103556.
- Xiang, Z. and Gretzel, U. (2010), "Role of social media in online travel information search", *Tourism Management*, Vol. 31 No. 2, pp. 179-188.
- Xinhuanet (2023), "China's outbound tourism sees robust recovery during 'golden week' holiday", available at: <https://global.chinadaily.com.cn/a/202310/01/WS6518b55aa310d2dce4bb8a5b.html> (accessed on 16 December 2023).
- Yiu, C.Y. (2023), "The impacts of shopping tourism on retail sales and rents: lessons from the covid-19 quasi-experiment of Hong Kong", *Journal of Risk and Financial Management*, Vol. 16 No. 6, p. 301.

- 
- Yu, J.K. and Li, Y.H. (2020), "Evolution of marine spatial planning policies for mariculture in China: overview, experience and prospects", *Ocean and Coastal Management*, Vol. 196, p. 105293.
- Zeinali, B., Jafarpour, M., Hessam, A., Shojaeivand, B. and Zolghadr, H. (2014), "Tourists' satisfaction with and loyalty to shopping experience: a socio-demographic analysis", *International Journal of Academic Research in Business and Social Sciences*, Vol. 4 No. 6, p. 67.
- Zhang, Z., Ye, Q., Law, R. and Li, Y. (2010), "The impact of e-word-of-mouth on the online popularity of restaurants: a comparison of consumer reviews and editor reviews", *International Journal of Hospitality Management*, Vol. 29 No. 4, pp. 694-700.
- Zhang, K., Chen, Y. and Li, C. (2019), "Discovering the tourists' behaviors and perceptions in a tourism destination by analyzing photos' visual content with a computer deep learning model: the case of Beijing", *Tourism Management*, Vol. 75, pp. 595-608.
- Zhu, D., Xu, H. and Jiang, L. (2016), "Behind buying: the Chinese gaze on European commodities", *Asia Pacific Journal of Tourism Research*, Vol. 21 No. 3, pp. 293-311.

### Further reading

- Government of Macao Special Administrative Region Statistics and Census Service (2020), "Tourism, MICE, and gaming statistics", available at: [www.dsec.gov.mo/zh-MO/Statistic?id=401](http://www.dsec.gov.mo/zh-MO/Statistic?id=401)
- Minister of Culture and Tourism, PRC (2020), "Annual report of China outbound tourism development 2021", available at: [http://zwgk.mct.gov.cn/zfxgknb/2020n/202101/t20210129\\_921144.html](http://zwgk.mct.gov.cn/zfxgknb/2020n/202101/t20210129_921144.html)
- Wang, S.-M. (2012), "Chinese tourists' satisfaction with international shopping centers: a case study of the Taipei 101 building shopping mall", *ISBN*.

### Corresponding author

Cora Un In Wong can be contacted at: [corawong@mpu.edu.mo](mailto:corawong@mpu.edu.mo)

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