

# Unlocking Tourism Diversity in Winter: Clusters of Tourists in Lisbon Based on Motivations, Profiles, and Behaviour

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**Abstract:** Recent trends in Lisbon's winter tourism indicate a shift towards off-peak travel, attracting diverse visitors with its rich cultural heritage, sustainable initiatives, and extended stay options for digital nomads. The city's culinary scene, arts, wellness activities, and tech-driven tourism options enhance its appeal. Aligned with these recent trends, tourism in Lisbon's region during the winter season presents a unique and dynamic landscape influenced by a wide range of motivations, tourist profiles, and travel behaviours. This study aims to define distinctive clusters of winter tourists in Lisbon by analysing these key variables, providing valuable insights specific to the winter travel context. Based on a compiled dataset from the winter season in Lisbon, this study delves into examining the factors driving tourist visits, encompassing socio-economic backgrounds, travel frequency, and age demographics. We aim to reveal the distinctive subgroups that define Lisbon's winter tourist population, employing data analysis techniques such as cluster analysis. From an academic perspective, this study offers a novel tourist segmentation model based on motivations, profiles, and behaviour. This model enriches the existing body of knowledge in tourism studies, providing a valuable reference for future research. For tourism agents in Lisbon, this study provides actionable insights to enhance strategic decision-making. By segmenting winter tourists, they can tailor marketing strategies and product development to cater to diverse tourist segments. Moreover, this approach can lead to economic benefits, optimising resource allocation, and revenue generation.

**Keywords:** Travel motivations, Push factors, Segmentation, Urban tourism, Winter tourism

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## 1. Introduction

Winter tourism in urban settings has increasingly become a focal point for research, driven by the realisation that cities offer a unique blend of attractions and activities during the off-peak seasons that attract a diverse array of visitors (Ashworth and Page, 2011; Koens and Milano, 2023; Richards, 2018). Lisbon's rich cultural heritage and vibrant arts scene provide a compelling case study for examining these dynamics. Despite the growing interest, there remains a significant gap in the academic literature specifically addressing winter tourism in Lisbon, especially from a segmentation approach that considers the distinct profiles of tourists during this less typical tourism season.

Recent studies have argued for the importance of understanding the distinct seasonal patterns of tourist activities and how they contribute to the economic sustainability of urban destinations (McKercher et al., 2023; Vergori, 2017). Furthermore, literature on tourist segmentation highlights the need for city destinations to tailor their marketing strategies to different tourist segments to enhance destination appeal and competitiveness. The burgeoning interest in niche tourism markets, such as LGBTQ+ travel and digital nomadism, further emphasises the need for such targeted approaches (Dolnicar, 2020).

Based on data collected from tourists visiting Lisbon during the winter, three clusters were identified based on distinct travel motivations - push factors. This study advances tourism segmentation theory by identifying distinct clusters characterised by specific travel motivations and nuanced travel behavioural and sociodemographic aspects. Additionally, the findings help city planners and tourism marketers tailor strategies to meet the particular needs of different tourist segments, enhancing Lisbon's appeal as a winter destination.

## **2. Literature Review**

### **2.1 Travel Motivations**

Motivation is extensively recognised as fundamental in understanding human behaviour across various academic disciplines, including psychology, sociopsychology, and marketing. It has a critical role in shaping consumer decision-making, a topic scholars have rigorously explored over the years (Fodness, 1994; Gillison et al., 2019).

Motivation significantly influences tourist behaviour in the tourism industry, guiding everything from destination choice to activity selection during travel. Rooted in tourists' internal desires and values, these motivations often subconsciously shape decision-making processes and ultimately determine the travel experience (Pereira et al., 2019; Yoo et al., 2018).

In recent decades, the study of travel motivations has garnered extensive attention in tourism research, underscoring a direct link between motivational factors and travel intentions and behaviours. This body of research suggests that a deep understanding of travel motivations is essential for effectively meeting the needs and preferences of tourists, ultimately influencing their overall travel experiences (Lin and Nawijn, 2020; Wong et al., 2018).

The push and pull theory of motivations (Dann, 1977) is a widely accepted theoretical framework in tourism research. It postulates that the push and pull effect determines tourists' decision to travel: people travel because they are pushed by internally driven socio-psychological motives and pulled by externally driven destination-related motives (Crompton, 1979). Hence, push factors correspond to the internal aspects of the individual, to their psychosocial motivations for travel (Prayag and Hosany, 2014), while pull factors relate to aspects external to the individual, including the set of attributes and characteristics of tourist products (Yoon and Uysal, 2005).

The push-pull model has been applied across various tourism contexts to explore tourist motivation (Dancausa et al., 2023; Liu, 2023), including food tourism (Su et al., 2018), culture and heritage tourism (Chen and Mo, 2014; Yousefi et al., 2015), adventure tourism (Giddy, 2018.), and cruise tourism (Whyte, 2017). These studies reveal that both internal and external factors play a role in influencing tourist motivation. Anyway, the relative importance of these factors may vary depending on the specific context.

As a result, a considerable number of travel motivations have been identified, such as escape, prestige, challenge, adventure, excitement, relaxation, self-discovery, ego-enhancement, social circles, gaining knowledge, spiritual needs, and family togetherness (*e.g.*, Baniya and Paudel, 2016; Rita et al., 2019).

### **2.2 Urban Winter Tourism**

Tourism seasonality represents a significant challenge in the tourism industry, affecting destination management and economic stability (Baños-Pino et al., 2023; Böcker et al., 2013; Coromina and Camprubí, 2016). Urban winter tourism refers to the phenomenon of tourists visiting urban destinations during the winter season, attracted by the city's cultural and urban experiences rather than traditional snow-centric activities. This form of tourism leverages the unique attributes of cities to offer diverse attractions and activities even in colder weather (Connell et al. 2015; Duro 2018).

Urban winter tourism moves away from traditional activities like skiing and snowboarding, focusing instead on cultural events, festivals, markets, and outdoor activities suitable for cold weather. This shift from snow-centric to cultural and urban experiences highlights the versatility and appeal of cities as winter destinations. Cities leverage their cultural assets to host diverse winter events and activities that capitalize on the unique features of urban settings. This strategy enhances traditional tourist offerings, reduces dependency on specific weather conditions, and attracts visitors during the off-peak season, leading to significant economic benefits (Bausch & Unseld 2018; Bichler & Pikkemaat 2021).

Tourists, especially those from snow-deprived regions, are drawn to urban destinations seeking novelty in winter landscapes and are further motivated by the festive ambience of holiday celebrations like New Year's Eve, for

instance, fostering socialising and exploration. Overall, this blend of seeking novelty and participating in seasonal festivities significantly motivates tourists to choose urban destinations during winter (Cocolas et al., 2016).

Winter tourism in Lisbon offers a unique chance to experience the city's notable features during the cooler months, influenced by several push factors that draw visitors. The city's mild climate, vibrant cultural events, affordable travel options, and unique culinary offerings are significant attractions. These elements and tourists' internal motivations - such as comfort, cultural engagement, value, and culinary curiosity, fundamentally influence their decision to visit. Understanding these pull and push factors provides deeper insights into why Lisbon continues to captivate diverse visitors during winter, highlighting the complex interplay between destination attributes and personal travel motivations (Loureiro and Sarmento, 2019; Machete et al., 2014).

### **2.3 Tourist Segmentation Based on Push Factors**

Segmenting tourists according to their push factors is vital in the tourism sector, shaping marketing approaches, resource allocation, and sustainable development. By understanding tourists' internal motivations, destinations can customise marketing strategies to cater to diverse needs effectively, thereby boosting promotional efficacy and overall destination attractiveness.

Identifying specific segments such as escape, novelty, or passive seekers enables destination managers to craft targeted marketing strategies that resonate with each group's unique motivations, as highlighted by Tsegaw (2023). This strategic approach not only improves marketing outcomes but also optimises the use of resources, particularly in digital and social media platforms, where content can be specifically configured to attract tourists based on their motivational factors (Katsikari et al., 2020).

Furthermore, understanding tourist push factors aids in strategically allocating resources, ensuring that services are tailored to meet the expectations of distinct tourist groups. This not only enhances the tourist experience, potentially increasing destination loyalty, but also aligns with sustainable tourism practices by addressing the specific needs of tourists in a manner that promotes resource efficiency (Mesić et al., 2022).

## **3. Method**

### **3.1 Data Collection and Instruments**

A self-administered questionnaire was used to collect data from a convenience sample of Lisbon region tourists. The respondents answer the questionnaire autonomously at their own pace, without interference from the interviewer. This process assures the respondent a sense of anonymity and security, promoting honesty in responses and reducing social desirability bias. Thirteen sampling points were identified to cover the region as best as possible, and the data was collected between January and February 2024. The winter season in Lisbon was defined based on climatic and tourism industry standards. In the Lisbon region, winter spans from December to February and is characterised by cooler temperatures and a distinct shift in tourist activities and motivations. The tourism industry in Lisbon aligns its marketing and operational strategies with this seasonal framework, promoting winter-specific attractions and events. Our study excluded December due to the particular characteristics of the holiday season events that could affect travel motivations and tourists' decisions.

The list of sources of tourism information that people usually consider when organising tourism travels (rated by respondents from 1- Not at all Important to 7- Extremely Important) was adapted from the literature (Coromina and Camprubí, 2016; No and Kim, 2015), as well as the list of reasons to take the trip (1- Totally Disagree; 7- Totally Agree) (Rita et al., 2019; Sangpikul, 2008, Yung-Kun et al., 2015); other variables included in the questionnaire intended to describe the participants' demographic profile and travelling behaviour.

### **3.2 Sample Profile**

The convenience sample comprises 306 observations. The age distribution reflects a broad spectrum, with a greater percentage falling within the 26 to 35 years bracket (38%). The 18 to 25 years group (20%), the 36 to 45 years group, and the 46 to 55 years group (15% each) are also noteworthy. The gender distribution reveals a slight predominance of women, constituting 55% of the sample. 77% of respondents indicated possessing 'Tertiary education', and 21% hold secondary education. Among the respondents, 60% are employed full-time, and 13% are students. Entrepreneurs constitute 12%; the remaining sample was formed by retirees, part-time employees, and unemployed participants. 45% of the participants reported an annual gross income below 20,000 euros, while 42% reported between 20,000 and 40,000 euros. The rest of the sample reported more than 40 000 euros. Respondents originate from a diverse range of 31 countries, but the majority comes from European countries (76%), with Spain (17%), Italy (15%), and France (12%) emerging as the most represented.

Related to travel behaviour, 71% of the tourists were visiting the Lisbon region for the first time. The other participants have visited the area one to three times before. 69% consider their travel arrangements independent, and 30% purchased the service from a travel agency or tour operator. 31% visited the region with family, 30% with friends, 26% with a spouse or partner, 11% were solo travellers, and 1% with colleagues or co-workers. The main reasons for the trip were cultural exploration and experience (58%), leisure (56%), and adventure and exploration (22%).

### 3.3 Data Analysis

A K-means algorithm analysis was performed for two, three, four, and five clusters. The solution of three segments was confirmed as the best option statistically. The discriminant analysis revealed that 98% of the cases were correctly classified. The Wilks statistic for the two discriminant functions was 0,081 (<0,01), confirming significant differences between the three groups. The canonical correlations were 0,861 and 0,829 for functions 1 and 2, respectively. Figure 1 shows the position of the clusters according to the two discriminant functions. ANOVA tests confirm the differences between the motivation variables among the three groups, except for 'I wish to relax' and 'I wish to see the beauty of the place'. Segment characterisation was done through descriptive statistics, and differences were tested using Qui-square and ANOVA /Kruskal-Wallis tests.

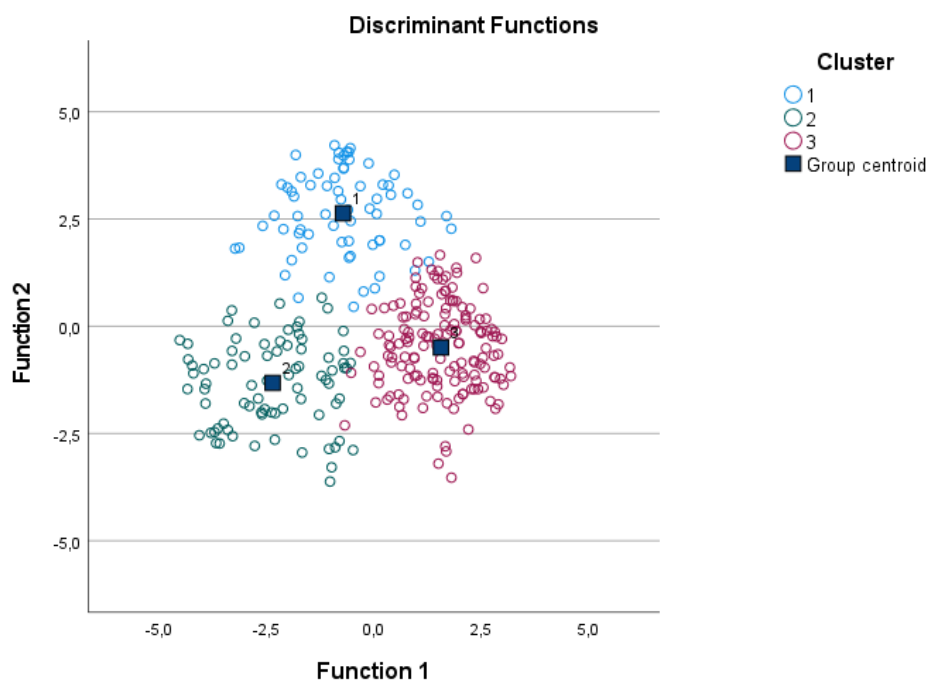


Figure 1: Clusters position supported by travel motivation

## 4. Results

We begin by describing the traits that are shared across all segments. Then, the characterisation of each cluster is presented, considering travel profile, motivations, sources of tourism information, and sociodemographic characteristics.

Regarding travel profile, there was no significant difference between tourists visiting the region for the first time across the three segments (between 65% and 77%). 'Cultural exploration and experience' is the primary reason for travelling, cited by 50% to 60% of respondents across all segments, although nearly 80% of those in cluster 2 also travelled for 'leisure' purposes. Adventure and exploration are other common travel reasons, with 19% to 24% of responses in each segment. Motives such as 'family reunions', 'work-related travel', 'honeymoons', and 'educational' pursuits received minimal responses, ranging from 0% to 6%, with "work and business" travel slightly more prevalent in cluster 3.

Regarding travel motivations, 'I wish to relax' and 'I wish to see the beauty of the place' are consensual across all three segments. Regarding the motivation, 'I wish to relax,' Cluster 1 had a 79.7% total agreement, cluster 2 had 77.5%, and Cluster 3 had a 73.2% total agreement. Concerning 'I wish to see the beauty of the place', cluster 1 had 98.6%, cluster 2 had 91.3%, and cluster 3 had 90.8%

Concerning sources of tourism information, all segments similarly valued 'official websites (e.g., websites of locals, attractions, tourism organisations)' and 'search engines (e.g., Google)'.

As for the sociodemographic profile, there were no significant differences among the three segments regarding the 'Current professional situation' of participants, with 59% to 65% being 'Employed full-time'.

#### 4.1 Cluster 1: Cultural Explorers

**Travel profile** - Regarding travel arrangements, 49% of the respondents from this segment opted for independent travel arrangements, while the remaining (44%) preferred services purchased through a travel agency. Most travellers prefer to go with 'family members' or a 'spouse/partner', making up nearly 90% of the segment, while fewer choose to travel with 'friends' or 'solo'. Trips of 1-7 days are most common, comprising over 70% of responses from this segment, but 1–2-week stays are also notable at 26%. The main motivation for travel is 'cultural exploration or experiences', which nearly 60% of participants cite, closely followed by 'leisure' at 49%.

**Travel motivations**- Tourists in this segment strongly disagree with the statement, 'I wish to have a break from everyday life'. Conversely, they show the highest level of agreement for 'Interactions with families' and 'I wish to interact with other people'. Additionally, there is a higher agreement, compared to other segments, with 'I wish to be in contact with nature' and 'I wish to observe animals that are not living in the country where I live'.

**Tourism information sources** - In this segment, the most influential sources of information, ranked by their degree of importance, are 'Search engines (e.g., Google)', at 81.2%, 'Official websites (e.g., websites of locals, attractions, tourism organisations)', at 66.7%, 'Friends and relatives' recommendation', at 59.4%, and 'Sites of reviews (e.g., TripAdvisor, Booking, Trivago)' at 55.1%. For 'Travel agencies', 40.6% of respondents consider it extremely important, while 24.6% do not attribute any importance to it. 'Tourism brochures' also see an equal split at 24.6% between those who find them extremely important and those who don't find them important at all. Press, radio, and television are deemed important by 66.7% of respondents from this segment. 'Tourism blogs' exhibit a similar pattern, with 55.1% agreement. On the less favourable side, 'Tourism fairs' are considered "not at all important" by 38.2% of respondents, 'Social networks (Facebook, Instagram, YouTube, etc.)' by 44.9%, and 'Digital influencers' by 60.9%.

**Sociodemographic profile** – In this segment, most respondents are male (55%). There is nearly an equal split between individuals with 'Secondary/Professional education' and those with 'Tertiary-University' qualifications (47% versus 49%). This segment also comprises the highest percentage of 'Employed-full time' (65%) and 'Retired' (25%) individuals among the three segments. Furthermore, 59% of the respondents report an income bracket of €20,000 to €40,000.

#### 4.2 Cluster 2: Leisure explorers

**Travel profile** - Regarding travel arrangements, 50% of respondents from this segment indicated independent travel arrangements, while the other 50% preferred services purchased through a travel agency. Regarding the travel party composition, this segment has the highest proportion (24%) of 'solo travellers'. However, there is a stronger preference for travelling with 'Family members' or a 'spouse or partner', which accounts for 73% of the total. Additionally, the data reveals a preference for stays lasting '4-7 days' and '1-2 weeks', representing 84% of responses. Regarding the reason for travel, 'Leisure' notably stands out in this segment, with a significantly higher percentage (79%) of affirmative responses, nearly twice as many as in the other segments.

**Travel motivations** - 'I wish to have fun' garners the highest level of agreement among the listed motivations in this segment, while 'I need to study or work' encounters complete disagreement. There is also a strong disagreement about 'I wish to interact with my friends'. Furthermore, 'I wish to do what most people think is necessary to do at least once in life' receives lower levels of agreement than the other two segments.

**Tourism information sources** - This segment distinguishes itself by placing greater importance on 'Tourism blogs', demonstrating less variability in this preference. It assigns the least significance to 'Friends and relatives' recommendations.

**Sociodemographic profile** - This segment exhibits a nearly equal distribution of male and female participants (50% versus 49%). It primarily comprises individuals aged 26 to 55, constituting approximately 80% of its demographic. Notably, 89% of respondents hold a 'Tertiary-University' degree, the highest proportion among all segments. Regarding their 'Current Professional Situation', it ranks second in the percentage of 'Employed-full time' respondents (61.3%), has the highest rate of 'Entrepreneurs' (19.8%), and uniquely includes 'Unemployed'

respondents at 4%. Income levels are relatively evenly distributed, with 48% earning less than €20,000 and 44% earning between €20,000 and €40,000.

### **4.3 Cluster 3: Social Explorers**

**Travel profile** - This segment is distinguished in 'Travel arrangements' by a significant preference for independent travel arrangements, with 85.6% choosing this option compared to only 14.4% opting for the more traditional services purchased from a travel agency or tour operator. Concerning the 'Travel Party', this segment is notable for a high rate (56%) of 'travelling with friends' and a low rate (11,1%) of travelling with a 'spouse or partner'. It shows a preference (73,2%) for stays ranging from '4-7 days' (42,5%) to '1-2 weeks (28,8%)'. The primary reason to travel is 'Cultural exploration or Experience' (60%), followed by 'Leisure' (49%).

**Travel Motivations** - This segment exhibits the most disagreement and greatest variability concerning the desire 'to know different cultures'. Conversely, 'I wish to interact with my friends' receives the highest level of agreement. Both 'I wish to feel more independent' and 'When discussing with my friends on social media (such as Facebook) I raised the impression that I would do it' also show high levels of agreement. Additionally, this segment shows strong agreement for motivations such as 'I wish to have fun', 'I wish to see the beauty of the place', 'I wish to have a break from everyday life', 'I wish to know different cultures', and 'I wish to relax'. Motivations such as: 'I wish to feel more independent', 'I wish to interact with my friends', 'When discussing with my friends on social media (such as Facebook), I expressed the intention to do it', 'I wish to experience beautiful natural landscapes', 'I wish to be in contact with nature', 'I wish to do what most people think is necessary to do at least once in life', 'I wish to interact with other people', and 'I feel connected to the Lisbon region' also have relatively high levels of agreement. However, there is an important level of disagreement for motivations such as 'I wish to observe animals that are not native to my country', 'I wish to interact with my family (partner, children, mother, father, brothers, etc.)' and 'I need to study or work'.

**Tourism information sources** - The more traditional 'Travel agencies', 'Tourism brochures', and 'Press, radio, and television' are deemed least important by this segment, whereas 'Review sites' are highly valued and considered very important. Additionally, 'Digital influencers' and 'Social networks' are rated highly important and exhibit the least variability in this group.

**Sociodemographic profile**- In this segment, female participants constitute the majority (62%), with a significant portion (85%) aged 18 to 35 years and none over 65. Regarding education, 84% hold 'Tertiary-University' qualifications, with no respondents having only 'Primary' education. Regarding their 'Current Professional Situation', this segment includes the highest proportion of 'Students' (21%), the lowest level of 'Employed-full time' (58%), and nearly 11% are 'Entrepreneurs'. Financially, this group has the largest share (52%) in the lowest income (less than €20,000), reflecting the high number of students, and also holds the second-highest proportion (11.3%) within the €40,001 to €50,000 income range.

## **5. Discussion**

This study provides a comprehensive insight into the dynamics of winter tourism in Lisbon, highlighting its evolution and the diverse tourist segments it attracts. Next, we present a breakdown of the theoretical and practical contributions. The theoretical insights help build a solid academic foundation on urban winter tourism dynamics. At the same time, the practical applications provide actionable strategies for enhancing Lisbon's appeal and economic benefits during the winter months. These contributions are vital for sustaining tourism growth and adapting to changing tourist behaviours in urban settings.

### **5.1 Theoretical Contribution**

The research enriches the theoretical landscape. It contributes to urban tourism theory by illustrating how cities can leverage their inherent cultural and infrastructural advantages in less busy seasons. Moreover, the study enhances tourism segmentation theory by pinpointing distinct clusters grounded in travel motivations and profiling each based on nuanced behavioural and sociodemographic variables. It helps understand how different segments perceive and consume tourism differently, particularly in an urban winter context. Furthermore, integrating socio-economic factors like employment status, income levels, and educational backgrounds into the analysis provides a deeper theoretical understanding of how these elements influence travel preferences and behaviours, aligning with theories of consumer behaviour in tourism.

## 5.2 Practical Contribution

The study's findings offer valuable guidance for tourism marketers and city planners in Lisbon on tailoring their offerings to meet the distinct needs of various tourist segments during the winter. By understanding the primary travel motivations of each segment, tourism providers can diversify their products and services to better cater to these preferences. Additionally, insights from the study can aid in efficient resource allocation and policy formulation, helping to prioritise investments in tourism infrastructure such as enhancing cultural sites, improving public transportation, and developing winter-specific festivals and events. Understanding each segment's specific needs and preferences, including their length of stay and travel party composition, enables tourism operators to create more targeted and satisfying experiences that could lead to higher rates of repeat visitation and positive word-of-mouth.

## 5.3 Limitations and Further Research

The use of convenience sampling in the study on Lisbon's winter tourism poses a significant methodological limitation due to its susceptibility to selection bias, which may affect the sample's representativeness and limit the generalizability of the findings. Furthermore, the study's reliance on cluster analysis, which is heavily dependent on the chosen variables and data integrity, could be compromised by the limitations of the sampling method. Consequently, while the study offers valuable insights into the dynamics of winter tourism in Lisbon, these findings should be taken with caution, considering the potential biases and limitations of the study's design and methodology. Further research can be done by adding other research variables while keeping the questionnaire with a reasonable dimension.

Addressing these limitations in future research could involve expanding the scope of data collection across multiple seasons, including a broader geographical area, incorporating more granular demographic data, conducting longitudinal studies, and integrating more qualitative analyses to understand the cultural and social nuances affecting tourist behaviours.

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