

## Article

# Predictors of Hotel Clients' Satisfaction in the Cape Verde Islands

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**Abstract:** Tourism has been fundamental for countries' economic development, and Africa is the destination with the biggest tourism growth potential. Using 1414 travelers' online reviews collected from TripAdvisor, the present work aims to understand which variables predict the satisfaction of Cape Verde's hotel clients. Satisfaction was analyzed using sentiment analysis and ANOVA to predict the effect of the gathered variables on clients' satisfaction. Results indicate that 90% of the clients revealed positive satisfaction and that nationality, date of stay, and previous traveler experiences affect satisfaction. Contrarily to our predictions, there is no statistically significant evidence that gender influences satisfaction. The findings of this study will help hotel marketing managers to align their strategies accordingly and meet their clients' expectations.

**Keywords:** tourist satisfaction; Cape Verde islands; tourism marketing; client engagement



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## 1. Introduction

Tourism has been fundamental for countries' economic development [1], and the tourism sector has been increasing its importance over the last years in Africa [2]. According to the European Commission [3], Africa has the biggest tourism growth potential.

Tourism is particularly relevant for the Cape Verde islands since its economy is highly dependent on tourism revenues [2]. Cape Verde islands are an African archipelago in the central Atlantic Ocean and West Africa, consisting of ten volcanic islands. The Portuguese Madeira Islands, the Spanish Canary Islands, and Cape Verde Islands belong to the Macaronesia eco-region. Cape Verde features beautiful sandy beaches, some in a pure state, and tepid and turquoise blue water. The sunny and warm atmosphere, with little seasonal variations throughout the year, attracts tourists worldwide searching for sun, beaches, and beautiful landscapes.

As in other beach destinations, tourists' satisfaction during their stay is of major importance since it represents their well-being and enjoyment of their experience. A satisfied tourist tends to spend more money, advertise the place positively, revisit the same destination in the future, and become loyal [4]. These are fundamental factors for a tourism destination's sustainability. As far as insular tourism is concerned, tourists are exposed to different experiences that influence their satisfaction, such as beaches, food, culture, or leisure activities [5]. The contact with sea, sand, and sun on an island is regarded as the essential factor that influences satisfaction, increasing the likelihood of tourists returning to the same destination in the future and leading them to share their positive travel experiences [6].

Moreover, hotels play a relevant role in tourists' satisfaction. To maintain the competitiveness of the Cape Verde islands' tourism and thrive in the ever-changing business environment, hotel marketing managers need to meet their clients' desires and expectations

to satisfy their demands [7]. This requires predicting the factors that influence customer satisfaction the most, which can be achieved through customer opinion feedback [8]. Previous works have already considered the prediction of variables that influence the satisfaction of the hotel environment. For instance, Aakash and Aggarwal [9] aimed to predict hotel performance through eWOM using online reviews. Serra-Cantalops et al. [10] explored the role of satisfaction, quality, and positive emotions to determine which is more influential in positive hotel eWOM. Fernandes and Fernandes [11] tried to understand the nature and predictors of hotel clients' negative reviews. Nevertheless, no study aimed to understand the influence that gender, nationality, date of stay, and the clients' number of previous experiences have on the clients' hotel satisfaction through online reviews.

Given the importance of tourism for the development of Cape Verde Islands, we aim to identify the predictors for client satisfaction in hotels of Cape Verde Islands using clients' reviews, nationality, gender, date of stay, and the number of previous experiences shared on TripAdvisor. We collected 1414 TripAdvisor reviews from 13 four- and five-star Cape Verde hotels to achieve this aim. The data were analyzed through text mining, specifically the sentiment analysis (SA) technique. Our research hypotheses were tested with ANOVA tests. This work expects to contribute to the existing hotel marketing and management knowledge regarding consumer satisfaction on Cape Verde Islands.

## 2. Literature Review

### 2.1. Client Satisfaction in the Hotel Industry

Hotel marketing managers combine efforts to meet consumer expectations to provide the best possible service [12]. However, consumer opinion becomes an essential factor in influencing demand [13]. Therefore, companies in the hospitality industry collect and analyze information about the quality of service to understand what satisfies, or does not, their target audience [13,14].

Satisfaction can be defined as a balance between the knowledge acquired by consumers and their expectations, generating a positive or negative result [15,16]. The level of satisfaction is reflected by the evaluations they make after enjoying the service. Unmet expectations can lead to negative emotions such as anger and regret [17], while positive criticisms reveal consumer satisfaction with the experience [16]. Accordingly, consumer satisfaction is vital for the survival and sustainability of a hotel. Therefore, the evaluations made by tourists are very important for building a tourist destination brand [18,19]. It is also recognized that these assessments serve as suggestions and are advantageous for users to determine the destination of the next trip, place of accommodation, and activities to be carried out at the destination [20]. Hotels can only compete and succeed if they consider that client satisfaction is the critical factor for success in the hotel industry. Therefore, it becomes crucial for hotel marketing managers to understand the most relevant client characteristics that influence satisfaction [21,22]. Namely, their expectations and interests, culture, nationality, seasonality, travel experience, and socio-demographic characteristics [16,23–26].

### 2.2. Tourist Satisfaction through Online Reviews

Information shared by consumers on the Internet is classified as more reliable and credible since consumers freely contribute with their opinion without any psychological constraint [27,28]. Clients' opinions are essential since 84% of travel evaluations reported that online evaluations significantly influenced consumers' purchasing decisions [29]. With this, tourists can reveal their satisfaction through online reviews by rating the hotel's features and sharing their points of view [30,31]. Researchers have taken advantage of such outstanding tools to investigate tourists' satisfaction. For instance, Moro [32] collected online reviews to understand tourists' cultural differences between guests and host destinations, concluding that the guest origin influences the hotel scores granted on TripAdvisor. In the same line, Zhao et al. [33] aimed to predict tourist satisfaction through online reviews by using the technical attributes of online text, concluding that long reviews reveal lower client satisfaction. Using online reviews, similar studies were conducted

in small islands destinations. For example, Mate et al. [34] aimed to examine how Cook Islands hotel managers react to negative reviews on their TripAdvisor web page, suggesting strategies to improve customer satisfaction. Ferreira et al. [35] collected online reviews from TripAdvisor to understand the differences in tourism perception comparing Madeira and Bermuda Islands, suggesting an overall customer satisfaction in both archipelagos. Oliveira et al. [36] researched the most valued experiences tourists have in Cape Verde through online reviews, highlighting that the beach, quad bikes, and diving are the activities that most satisfy the tourists.

By gathering online reviews, hotel managers can understand tourists' overall satisfaction and build strategies for developing products and services that meet their expectations [22,29,37].

### 3. Theoretical and Conceptual Framework

Client satisfaction is the parity between the expectations of the client and his experience after purchasing the product or service [22]. It can be interpreted through positive consumer reactions to the company that provided them [24]. Considering the literature on tourism and hospitality, the current study examines the relationship between nationality, gender, date of stay, and travel experience on satisfaction.

#### 3.1. Nationality Effect on Satisfaction

Tourism and hospitality have continuously increased their income by expanding to international markets. However, clients from different cultures of nationalities have different expectations [38]. Likewise, cultural differences lead to different evaluations [39]. Any attempt to standardize a service is a failing strategy.

Many studies have examined the role that nationality plays in satisfaction. For instance, Pantouvakis and Renzi [40] tried to understand airport quality attitudes among different nationalities. After collecting data from 911 multinational passengers, the authors concluded that quality perception varies according to nationality. Examining 257,000 interviews from 19 different nationalities to determine client satisfaction variation between countries, Morgeson et al. [23] concluded that nationality is a determining factor for satisfaction. Following the rationale, it is proposed that:

**Hypothesis 1 (H1).** *Nationality is a predictor of satisfaction.*

#### 3.2. The Role of Gender on Satisfaction

Gender is an individual characteristic that significantly determines client satisfaction, and a set of characteristics differentiate a male from a female, affecting consumers' behavior [41]. The evolutionary psychology theory suggests sex differences in human behavior [42], while social role theory reveals that men and women socialize differently and play different roles in society [43,44]. For example, Homburg and Giering [45] found that the willingness of a woman to repurchase a product when satisfied was higher than for a man. Another study found emotional differences between men and women regarding service personnel's appearances, attitudes, and behaviors [46]. Thus, women are expected to react differently than men and show different satisfaction levels [47]. Thus, the following hypothesis is proposed:

**Hypothesis 2 (H2).** *Gender is a predictor of satisfaction.*

#### 3.3. Date of Stay and Satisfaction

The relationship between tourism and the date of stay is not static [48]. While summer vacations are factors that motivate family tourism [49], the fall season is the growing season in some regions of the U.S. due to the changes in leaf color [50]. Nevertheless, summer vacations usually result in higher satisfaction rates [26]. Seasonality indicates differences in demand or supply in the tourism industry and interferes with tourism satisfaction [51]. These fluctuations can be caused by climate conditions or school holidays [52,53].

Moreover, peak season can cause over-tourism, affecting service quality and tourist satisfaction. For instance, Frleta and Jurdana [54] aimed to understand the differences in satisfaction concerning offers during peak or low seasons, finding a significant difference in overall tourists' satisfaction. Cagnina et al. [55] tried to understand the tourists' perception of a destination affected by over-tourism. They found a decrease in tourists' satisfaction when over-tourism is perceived. Thus, it is proposed that:

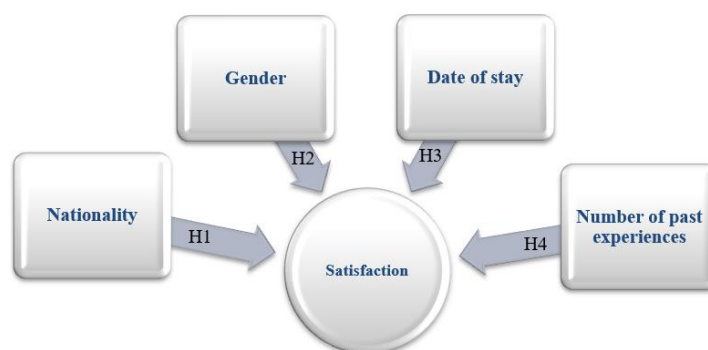
**Hypothesis 3 (H3).** *Date of stay is a predictor of satisfaction.*

### 3.4. Number of Experiences and Satisfaction

Client experience refers to the interaction between the client and the service providers (e.g., hotels) [5]. The involvement and interaction with the destination attributes are the origins of the clients' experience. It may occur through participation in events, tasting local food, or learning about a new culture, which influences tourist satisfaction [56]. Moreover, past experiences influence expectations. After a service evaluation, the tourist compares the outcome with his previous expectations [57]. If the experience is higher than the expectations, satisfaction increases. If the experience is lower than the expectation, it generates dissatisfaction. Tourist satisfaction might lead to trust and commitment, leading to revisiting the destination [58]. This fact is explained by the adaptation-level theory [59] that highlights that the service and prior experience influence expectations. Tourist feedback is considered more realistic when conducted by those with more experiences [60] since tourists can compare the experience with past experiences. Thus, the following hypothesis is proposed:

**Hypothesis 4 (H4).** *The number of previous experiences predicts satisfaction.*

The hypothesized model is presented in Figure 1.



**Figure 1.** Conceptual model.

## 4. Methodology

This study collected online reviews from TripAdvisor concerning hotel stays in Cape Verde Islands. Our purpose is to uncover the predictors of Cape Verde Hotels' client satisfaction. The collection of online secondary data allows access to opinions and captures real visitors' perceptions [61].

### 4.1. Sample Identification and Data Collection

Since 2002, TripAdvisor has nominated the best tourism establishments every year in terms of service, quality, and client satisfaction "based on millions of reviews and opinions from travelers around the world" in several categories [62]. Several times, Cape Verde has been nominated and won the Travelers Choice Best of the Best awards [63]. For this reason, we have collected individual TripAdvisor reviews from 13 four- and five-star category hotels in Cape Verde. Online reviews have been widely used in the tourism context to understand clients' satisfaction [32,64]. TripAdvisor is a famous worldwide platform where visitors can share their opinions regarding an experience [65].

Data were collected using a web scraper that iteratively crawled through the hotels' TripAdvisor webpage to collect all visitors' comments. In total, 2983 individual reviews were collected. The reviewers' names, nationality, number of past reviews, and date of stay were collected from each review. These were considered the independent variables. From the 2983 reviews, 1569 were discarded due to unanswered variables. The final dataset comprised 1414 reviews.

The reviewer's name was used as a proxy for gender, and the date of stay was recoded into a quarter of the year variable. The number of past experiences varied from 1 to 14,300. These were divided into four quartiles and labeled in four travels profiles: Occasional, Regular, Frequently, and Very Frequently. For this study, for an Occasional traveler profile, we considered a traveler that made five or fewer reviews on TripAdvisor. This traveler profile is someone who has lived few touristic experiences. In contrast, a Very Frequently traveler profile is the one that has experienced multiple and various experiences. For this study, it is someone that made more than 90 reviews. Between these two profiles, we have the Regular, whom we considered having experienced more than 6 and less than 25 experiences. The frequently profile has less touristic experiences than Very Frequently, but more experienced than a Regular traveler profile. This profile presents a number of experiences between 26 and 89.

Sample characterization can be observed in Table 1.

**Table 1.** Sample characterization ( $n = 1414$ ).

	Germany	Belgium	Spain	USA	France	Netherlands	Portugal	United Kingdom	Switzerland
Nationality	117 (8.27%)	66 (4.7%)	88 (6.2%)	86 (6.1%)	332 (23.5%)	107 (7.6%)	295 (20.9%)	222 (15.7%)	101 (7.1%)
Gender	Male	30 (2.1%)	24 (1.7%)	27 (1.9%)	36 (2.5%)	155 (11.0%)	38 (2.7%)	114 (8.1%)	91 (6.4%)
	Female	87 (6.2%)	42 (3.0%)	61 (4.3%)	50 (3.5%)	177 (12.5%)	69 (4.9%)	181 (12.8%)	56 (4.0%)
Date of stay	First Quarter		Second Quarter		Third Quarter		Fourth Quarter		
	433 (30.6%)		283 (20.0%)		258 (18.2%)		440 (31.1%)		
Traveler experience	Occasional			Regular		Frequently		Very Frequently	
	261 (18.5%)			371 (26.2%)		386 (27.3%)		396 (28.0%)	

#### 4.2. Data Analysis

Each comment was converted into a sentiment scale to quantify the satisfaction strength and polarity. The collected reviews were analyzed in R Statistical software, using the package "sentimentr", which allows SA. For the statistical analysis, we used IBM SPSS v26.

SA is a class of text mining techniques to determine subjective text information [66]. Similarly, SA can be defined as a set of experiences whose objective is to find similarities in textual messages and discern positive and negative opinions, emotions, and evaluations [67]. Due to its importance, several studies have been carried out using SA. For instance, Guerreiro and Rita [68] used SA to identify drivers of explicit recommendations. Alvarez et al. [69] demonstrated that non-rational factors play a role in the formation and activity of online social movements, impacting their potential viral spread.

Nevertheless, there is a lack of studies that use the sentiment scale to perform inferential and descriptive statistical analysis, making unfeasible possible conclusions and discoveries that would allow a deeper understanding of the satisfaction levels. SA is only used to uncover hotel clients' satisfied, neutral, or negative sentiments [70,71]. In this sense, we applied a scale that determines the level of client satisfaction created by Rita et al. [72]. The more positive they are, the greater the satisfaction. The more negative they are, the greater the dissatisfaction (Table 2). From Table 2, we defined the levels of variable satisfaction as a 7-point Likert scale, where one corresponds to a negative solid and seven to a positive solid.

**Table 2.** Sentiment scale, adapted from Rita et al. [72].

Satisfaction	Sentiment Score	Sentiment Scale
Negative Solid	$\geq 0.60$	1
Negative Regular	[0.30; 0.59]	2
Negative Fragile	[0.01; 0.29]	3
Neutral	0	4
Positive Fragile	[−0.29; −0.01]	5
Positive Regular	[−0.59; −0.30]	6
Positive Solid	$\leq -0.60$	7

To verify whether we could develop a parametric analysis, we verified the homogeneity of the variance using Levene's test and the normal distribution of the data using the Kolmogorov–Smirnov normality test, both assumptions for this type of statistical analysis. We obtained  $p < 0.05$ . The results showed that the variable Satisfaction does not follow a normal distribution ( $p < 0.05$ ), and all variables, except Nationality, showed homogeneous variance ( $p > 0.05$ ). The results are shown in Table 3.

**Table 3.** Homogeneity of variance tests.

	Levene Statistic	df1	df2	Significance
Nationality	3.652	8	1405	0
Gender	0.605	1	1412	0.437
Date of Stay (quarter)	1.3	2	1411	0.273
Traveler Experience	4.307	3	1410	0.005

We used ANOVA one-way analysis to predict the level of client satisfaction based on gender, date of stay, and traveler experience.

The assumption of homogeneity of variance was not valid for the Nationality variable, so we could not conduct the ANOVA one-way analysis. Therefore, Nationality was analyzed through the chi-squared association test described in Marôco [73].

We chose a significance level of 5% for the hypothesis tests.

## 5. Results and Discussion

### 5.1. Test of Between-Subject Effects

Firstly, we analyzed the between-subject effects to test whether there is an interaction between the date of stay, gender, travel experience, and satisfaction. According to the results shown in Table 4, the effects of gender, travel experience, and date of stay on satisfaction were not influenced by each other, as suggested by the non-significant interaction between the three factors. So, we could proceed to the analysis considering independence between the variables under study.

**Table 4.** Effects of gender, travel profile, and date of stay on satisfaction.

Source	Type III Sum of Squares	df	Mean Square	F	Significance	Observed Power
Traveler_Profile * Gender	1870	3	623	594	619	174
Traveler_Profile * Date_of_Stay	8928	9	992	946	484	480
Gender * Date_of_Stay	6312	3	2104	2005	111	518
Traveler_Profile * Gender * Date_of_Stay	10,689	9	1188	1132	336	570

### 5.2. Clients' Overall Satisfaction

The variable satisfaction was generated once the clients' reviews were analyzed with the "sentimentr" package. The sentiment values ranged from −0.91, the least satisfied, to 2.58, the most satisfied. These results highlight that the most-satisfied client had a stronger positive discourse than the least-dissatisfied client. The results suggest that 90.3% of the

hotel tourists revealed positive satisfaction, indicating that most of the clients enjoyed their stay at the hotels (Table 5).

**Table 5.** Overall Satisfaction frequencies.

Satisfaction	Frequency ( <i>n</i> )	Percent
Positive Solid	163	11.56
Positive Regular	546	38.72
Positive Fragile	564	40.00
Neutral	20	1.42
Negative Fragile	108	7.66
Negative Regular	6	0.43
Negative Solid	3	0.21
Total	1410	100.0

### 5.3. Satisfaction by Nationality

In Table 6, we verify that from the 1414 reviews, most were made by clients from France ( $n = 332$ ), Portugal ( $n = 295$ ), and the United Kingdom ( $n = 220$ ). Looking at all countries, Portugal ( $M = 5.74$ ,  $SD = 1.005$ ), Spain ( $M = 5.67$ ,  $SD = 0.844$ ), and the USA ( $M = 5.40$ ,  $SD = 0.949$ ) revealed the highest satisfaction.

**Table 6.** Satisfaction by nationality.

Nationality	Frequency ( <i>n</i> )	Satisfaction (Mean)	Standard Deviation
Germany	117	5.27	0.988
Belgium	65	5.32	1.187
Spain	87	5.67	0.844
USA	86	5.40	0.949
France	332	5.38	1.156
Netherlands	107	5.33	0.866
Portugal	295	5.74	1.005
United Kingdom	220	5.23	0.883
Switzerland	101	5.32	1.058

### 5.4. Satisfaction by Date of Stay

The first and fourth quarters were the periods with more comments ( $n = 431$  and  $n = 439$ , respectively) and less satisfaction ( $M = 5.33$ ,  $SD = 0.987$  and  $n = 258$ ,  $SD = 1.073$ , respectively). On the other hand, the second and third quarters had fewer comments, and the mean satisfaction was higher (Table 7).

**Table 7.** Satisfaction by date of stay.

Date of Stay	Frequency ( <i>n</i> )	Satisfaction (Mean)	Standard Deviation
First Quarter	431	5.33	0.987
Second Quarter	282	5.56	0.983
Third Quarter	258	5.52	1.052
Fourth Quarter	439	5.39	1.073

### 5.5. Satisfaction by Gender

Table 8 shows the mean of satisfaction and number of comments by gender. Although the number of comments is predominantly written by males ( $n = 853$ ) compared to females ( $n = 557$ ), the mean satisfaction is very similar between both groups ( $M = 5.41$ ,  $SD = 1.060$  and  $M = 5.44$ ,  $SD = 1.008$ , respectively).

**Table 8.** Satisfaction by gender.

Gender	Frequency (n)	Satisfaction (Mean)	Standard Deviation
Female	557	5.41	1.060
Male	853	5.44	1.008

### 5.6. Satisfaction by the Travel Experience

Table 9 shows the mean satisfaction according to people's travel frequency. There is an increasing variation in the number of comments, positively correlated to the frequency of travels. According to our results, people who travel very frequently are the most dissatisfied ( $M = 5.32$ ,  $SD = 0.038$ ). On the other hand, people who travel occasionally ( $M = 5.48$ ,  $SD = 1.144$ ), regularly ( $M = 5.46$ ,  $SD = 1.060$ ), frequently ( $M = 5.48$ ,  $SD = 0.893$ ) and very frequently ( $M = 5.32$ ,  $SD = 1.038$ ) have a very similar mean satisfaction.

**Table 9.** Satisfaction by travel frequency.

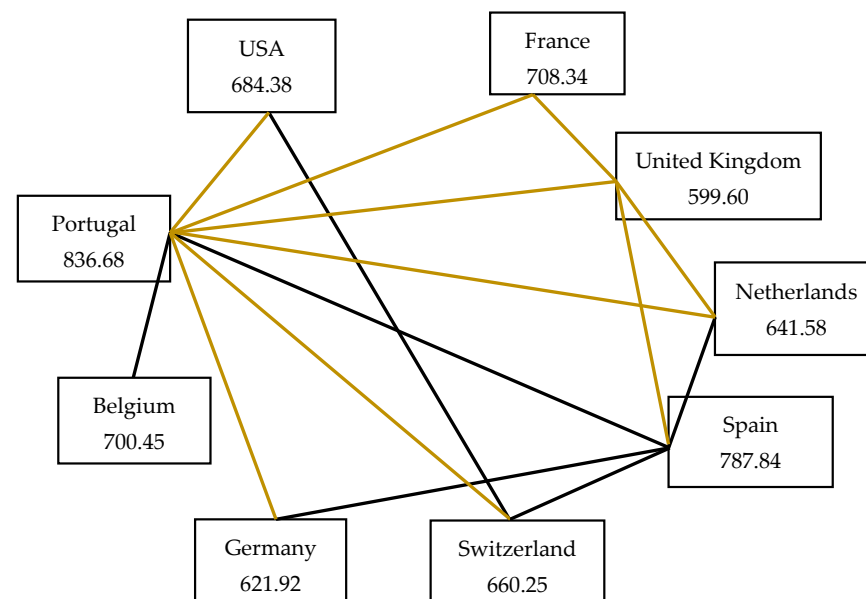
Travel Frequency	Frequency (n)	Satisfaction (Mean)	Standard Deviation
Occasional	260	5.48	1.144
Regular	369	5.46	1.060
Frequently	385	5.48	0.893
Very Frequently	396	5.32	1.038

### 5.7. Hypotheses Testing

We tested the previously formulated hypotheses using satisfaction as the dependent variable and nationality, gender, date of stay, and the number of reviews as independent variables.

Regarding nationality, given that  $\chi^2(48) = 125.090$  and  $p\text{-value} < 0.001$ , we reject the null hypothesis that satisfaction and nationality are independent and accept the alternative hypothesis: There is an association between each country and satisfaction.

Cochran's Q with multiple comparisons of the means of the orders (Figure 2), implemented in SPSS software v26, reveal that, concerning satisfaction, there are statistically significant differences between Portugal and Germany, The Netherlands, the United Kingdom, France, Switzerland, and the United States of America, between Spain and the United Kingdom, and between France and the United Kingdom ( $p < 0.05$ ). The differences between Spain and Germany are marginally significant ( $p = 0.076$ ).

**Figure 2.** Pairwise comparisons of Nationality.



Therefore, Hypothesis 1 is accepted. Nationality is one predictor of the level of client satisfaction. This result is aligned with Bodet et al. [74] who suggest that the satisfaction of hotel service attributes is influenced by nationality. Vieira et al. [75] uncovered that nationality influences tourist satisfaction and the willingness to recommend the destination to others and that expectations vary according to the nationality [76], influencing their attitudes, behaviors, and evaluations [12,39].

We used an independent-samples ANOVA test to verify whether clients' gender predicts their satisfaction level. Table 10 summarizes the ANOVA test results, in which we have obtained  $F(1413) = 0.364$  and  $p\text{-value} > 0.05$ . Therefore, the satisfaction level is not predicted by clients' gender. Thus, we reject Hypothesis 2. This result contradicts the evolutionary psychology theory [42] and the social role theory [43]. Men often share more positive reviews than women [77], while women are more sensitive to relational experiences [41] and pay attention to quality and physical attributes [24]. This result might have to do with men and women being equally focused on the service result.

**Table 10.** ANOVA statistics.

	Mean Square	F	Asymptotic Significance (2-Sided)
Hypothesis 2: Effect of Gender	0.564	0.532	0.547
Hypothesis 3: Effect of Date of Stay	2.552	2.412	0.090
Hypothesis 4: Effect of Traveler Experience	2.289	2.165	0.077

To test whether the date of stay is a predictor of satisfaction (Hypothesis 3), we performed the one-way ANOVA test. We obtained  $F(1413) = 3.835$  and  $p\text{-value} > 0.05$ . Therefore, we accept that mean satisfaction is significantly different between quarters of stay and accept Hypothesis 3. This result is consistent with previous studies. Tourists often search for summer and beach destinations, particularly in warm weather and school holidays [52]. However, this tourism peak can lead to over-tourism, affecting the service quality and, in turn, tourist satisfaction [54].

Finally, to test if the level of satisfaction is predicted by the number of previous experiences (Hypothesis 4), we ran a one-way ANOVA test. The results indicate that the number of previous experiences affects satisfaction in a moderately significant way ( $F(1413) = 2.287$ ;  $p\text{-value} = 0.077$ ). Since we obtained a  $p\text{-value}$  close to 0.05, we used the chi-square independent test to confirm the significance. The results showed  $\chi^2(18) = 127.011$  and  $p\text{-value} < 0.001$ . Therefore, we reject the null hypothesis of independence between variables and conclude that the number of previous experiences predicts the level of satisfaction. According to the adaptation-level theory [59], tourist expectations vary according to the number of past experiences. Previous experiences affect expectations, influencing satisfaction [57]. Tourists have a more realistic experience compared to previous ones [60].

## 6. Conclusions

Through this study, it was possible to reach several conclusions regarding the tourism of Cape Verde Islands, under various perspectives, mainly regarding satisfaction. It has been possible to see that many emerging or developing countries have grown thanks to economic investment in tourism. In many cases, the tourism sector is a fundamental pillar of their economy, such as Cape Verde and Mauritius [78,79].

Tourism demand in Cape Verde Islands has increased among tourists of various nationalities. This has positive feedback for the increasing trend due to the destination's promotion through social networks and electronic word-of-mouth [18,80].

According to SA results, 90.3% of tourists revealed positive satisfaction. The most-satisfied tourist profiles were male, came from either Portugal, Spain, or EUA, traveled to Cape Verde in the first or third quarter of the year, and as far as traveler experience is

concerned, is an occasional traveler. Our hypotheses tests confirmed that nationality, the quarter of the year, and the number of past experiences predict satisfaction. On the contrary, satisfaction does not vary significantly according to gender.

This study aimed to uncover the predictors of Cape Verde hotels clients' satisfaction. This research provided relevant information to the scientific literature, emphasizing that nationality, date of stay, and the number of past experiences predict client satisfaction. Simultaneously, it provides relevant knowledge to hotel marketing managers of Cape Verde Islands, enabling them to create differentiation strategies to meet their clients' demands. We have highlighted that nationality, the number of previous experiences, and the date of stay predict the overall perception of the clients. Understanding the customers' characteristics that predict satisfaction benefits many involved tourism operators [81]. Considering each of these variables, different marketing approaches will enhance higher hotel satisfaction, leading to organizations' survival and adaptation efforts [82]. A satisfied tourist tends to spend more money, advertise the place positively, revisit the destination, and become loyal [4].

There are limitations to acknowledge that can be used to develop future research. Regarding the data analysis, it should be noted that SA does not detect sarcasm or irony. Moreover, this study focused only on the reviews collected on the TripAdvisor website. In this sense, it would be promising in future investigations to collect reviews on other online travel websites, such as Trivago or [booking.com](https://www.booking.com), accessed on 14 December 2021. Although TripAdvisor is perceived as trustworthy [83], there might be a platform bias. Moreover, online reviews have limitations, including bias and probable manipulation. Future investigations could consider the application of surveys directly to clients to complement the findings of this work.

It would be interesting to add other socio-economic variables to this study so that knowledge about clients would be more prosperous. This way, the segmentation process could be more efficient. Comparing the results obtained from this study with other similar destinations and hotel categories would allow a comparison analysis between destinations with common aspects and help to understand their differences in terms of satisfaction. Finally, an unbalanced sample is also a limitation that must be addressed in this study. Future research should consider collecting a balanced sample.

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