



## **Articles - Tourism Management**

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# Temporal distance in hotel evaluation and its effects on satisfaction and word-of-mouth

Distância temporal na avaliação de hotéis e seus efeitos na satisfação e no boca-a-boca

Distancia temporal en la evaluación de hoteles y sus efectos en la satisfacción y en el boca a boca

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#### Keywords:

Temporal distance; Travel motives (business/leisure); Satisfaction; Word-of-mouth (WOM); Tangible and intangible attributes.

#### Abstract

This study aims to analyze the influence of temporal distance on the evaluation of tangible and intangible attributes in lodging experiences, and its effects on satisfaction and word-of-mouth (WOM) intention. Based on the Theory of Psychological Distance and Construal Level Theory (CLT), the theoretical model was initially validated by 17 experts, including academic professionals and hotel managers. Subsequently, a survey was conducted with 482 Brazilian guests whose last stay had occurred between less than 1 month and up to 24 months before data collection. The analysis was carried out using structural equation modeling and multigroup analysis (MGA). The results indicate that satisfaction did not show significant statistical variation between tangible and intangible attributes over time. On the other hand, word-of-mouth was more influenced by tangible attributes in evaluations closer to the consumption moment and by intangible attributes in more distant evaluations, especially when moderated by travel purpose (business or leisure). The study contributes by integrating psychological constructs into the consumer behavior literature in tourism, offering practical implications for marketing strategies and hotel management.

### Palavras-chave:

Distância temporal; Motivos de viagem (negócio/lazer); Satisfação; Boca-a-boca (WOM); Atributos tangíveis e intangíveis.

### Resumo

Este estudo tem como objetivo analisar a influência da distância temporal na avaliação de atributos tangíveis e intangíveis em experiências de hospedagem, e seus efeitos sobre a satisfação e a intenção de boca-a-boca (WOM). Baseado na Teoria da Distância Psicológica e na Teoria dos Níveis de Construção (CLT), o modelo teórico foi inicialmente validado por 17 especialistas, entre profissionais acadêmicos e hoteleiros. Posteriormente, um survey foi aplicado a 482 hóspedes brasileiros cuja última hospedagem havia ocorrido entre menos de 1 mês e até 24 meses antes da coleta. A análise foi conduzida com modelagem de equações estruturais e análise multigrupo (MGA). Os resultados indicam que a satisfação não apresentou variação estatística significativa entre atributos tangíveis e intangíveis ao longo do tempo. Por outro lado, o boca-a-boca foi mais influenciado por atributos tangíveis em avaliações próximas ao consumo e por atributos intangíveis em avaliações mais distantes, especialmente moderado pelo motivo da viagem (negócios ou lazer). O estudo contribui ao integrar construtos psicológicos à literatura de comportamento do consumidor em turismo, oferecendo implicações práticas para estratégias de marketing e gestão hoteleira.

### Palabras clave:

Distancia temporal; Motivos del viaje (negocios/placer); Satisfacción; Boca a boca (WOM); Atributos tangibles e intangibles.

### Resumen

Este estudio tiene como objetivo analizar la influencia de la distancia temporal en la evaluación de atributos tangibles e intangibles en experiencias de hospedaje, y sus efectos sobre la satisfacción y la intención de boca a boca (WOM). Basado en la Teoría de la Distancia Psicológica y en la Teoría de los Niveles de Construcción (CLT), el modelo teórico fue validado inicialmente por 17 expertos, entre profesionales académicos y gerentes hoteleros. Posteriormente, se aplicó una encuesta a 482 huéspedes brasileños cuya última estadía había ocurrido entre menos de 1 mes y hasta 24 meses antes

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de la recolección de datos. El análisis se realizó mediante modelado de ecuaciones estructurales y análisis multigrupo (MGA). Los resultados indican que la satisfacción no presentó una variación estadísticamente significativa entre atributos tangibles e intangibles a lo largo del tiempo. Por otro lado, el boca a boca fue más influenciado por atributos tangibles en evaluaciones cercanas al momento del consumo y por atributos intangibles en evaluaciones más distantes, especialmente moderado por el motivo del viaje (negocios o placer). El estudio contribuye al integrar constructos psicológicos a la literatura de comportamiento del consumidor en turismo, ofreciendo implicaciones prácticas para estrategias de marketing y gestión hotelera.



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### 1 INTRODUÇÃO

The behavior of guests in the hotel industry is influenced by several stimuli that manifest from planning to the posthosting. Among these steps, the post-stay stage still receives less attention compared to the moments of choice and consumption, especially regarding how guests evaluate their experience after checkout (Kim et al., 2008; Zhang et al., 2021).

Understanding how the guest evaluates their experience after the stay allows for identifying whether the expectations were met, in addition to providing feedback for improvements in services. These evaluations are also frequently shared with other consumers, influencing the company's reputation (Arora & Chakraborty, 2021; Barboza et al., 2013; Cantallops & Salvi, 2014). Similarly, the moment after hosting represents a strategic opportunity to improve processes, correct failures, and gain a competitive advantage (Nebreda et al., 2020).

Analyzing how guests evaluate their experiences after checkout also requires considering their personal characteristics and travel contexts. One relevant variable in this process is the purpose of travel, which is frequently used as a segmentation criterion in tourism (Dolnicar, 2002; Jiang et al., 2019), primarily distinguishing between business and leisure trips (Kim & Park, 2017). In general, leisure travel tends to have a hedonic focus, such as relaxation and enjoyment (Jang et al., 2009; Jiang et al., 2019), while business travel follows a more utilitarian logic, oriented toward professional commitments (Westman et al., 2023). Such differences can influence service perception, directly affecting satisfaction and word-of-mouth intention (Frochot & Morrison, 2001; Wong & Chi-Yung, 2002).

In addition to the purpose of travel, another aspect that influences post-stay evaluation is the type of attribute considered. Hotel services are typically assessed based on tangible attributes (such as physical structure and cleanliness) and intangible ones (such as service and empathy) (Maric et al., 2016; Almeida & Pelissari, 2019). Although studies have addressed the importance of both, there is a scarcity of research analyzing how the perception of these attributes varies over time, especially when considering travel purpose and cognitive approaches.

To deepen this understanding, the theory of psychological distance, particularly temporal distance, offers a useful framework for analyzing how perceptions and evaluations of attributes change over time (Trope & Liberman, 2003, 2010). Complementarily, Construal Level Theory (CLT) examines the concrete and abstract mental representations of events and objects, which vary depending on their temporal proximity or distance (Trope et al., 2007).

Based on these theories, understanding how tangible and intangible attributes are evaluated over time can inform more effective decisions in management and marketing (Almeida & Pelissari, 2019; Rhee & Yang, 2015). Therefore, this study seeks to advance the field by integrating temporal distance, construal levels, and travel purpose into the analysis of satisfaction and word-of-mouth, offering an approach that remains underexplored in tourism research.

### **2 LITERATURE REVIEW**

### 2.1 Psychological Distance and Construal Level Theory

Humans have the unique ability to remember the past, experience the present, and plan for the future (Trope & Liberman, 2010). They reflect on their own experiences as well as those of others, creating and evaluating alternatives (Liberman & Trope, 2014). This capacity for mental projection is referred to as psychological distance.

There are four dimensions of psychological distance: temporal, spatial, social, and hypothetical (Liberman & Trope, 2014; Trope et al., 2007). This study focuses specifically on temporal distance, which refers to the perception of events and objects as being near or far in time (Trope & Liberman, 2003).

We adopt this perspective following previous research (Kyung et al., 2014), in combination with Construal Level Theory (CLT) (Trope & Liberman, 2010), which explores how different levels of mental abstraction influence the way people interpret events.

CLT posits that temporally proximal events are interpreted at low construal levels, emphasizing concrete details and specific features. Conversely, temporally distant events are processed at high construal levels, highlighting more abstract and general aspects (Trope & Liberman, 2003; Kim et al., 2008; Kyung et al., 2014). Trope et al. (2007) further explain that this abstraction occurs gradually rather than abruptly, forming a hierarchy of interpretation that varies depending on the perceived temporal distance.

### 2.2 Tangible and Intangible Attributes in Hospitality

Guest' experience results from a combination of tangible and intangible attributes (Aquino et al., 2015; Maric et al., 2016).

Although several studies in hospitality research have explored service quality attributes (e.g., Aquino *et al.*, 2015; Barboza *et al.*, 2013; Limberger *et al.*, 2014), most do not explicitly classify these attributes as tangible or intangible. This study is based on widely used indicators for assessing hotel experiences, and through a preliminary expert-based study, we validated the classification of these attributes into two categories: tangible (physical and concrete elements) and intangible (subjective aspects of service delivery).

Research in the field indicates that the impact of these attributes on satisfaction may vary according to guest profile, hotel category, and travel purpose (Almeida & Pelissari, 2019; Kim & Park, 2017; Kocabulut & Albayrak, 2019; Jiang et al., 2019). While most studies focus on evaluations made during the stay, the present study advances the discussion by analyzing the interaction between tangible/intangible attributes and the temporal dimension of the guest experience.

Hospitality, as a service, is characterized by the combination of both attribute types (Vargo & Lusch, 2004). The separate analysis of these attributes, as explored by Ding and Keh (2017) and Maric et al. (2016), seeks to understand how consumers assess their importance in service provision. Our study addresses a similar gap by investigating how the relevance of these attributes changes over time and according to the travel purpose, and how this affects satisfaction and word-of-mouth.

Tangible attributes refer to physical and measurable elements, such as furniture, location, and price, whereas intangible attributes relate to subjective aspects, such as service and comfort (Aquino *et al.*, 2015; Maric *et al.*, 2016). According to Construal Level Theory (CLT), the relevance of these attributes may vary depending on the temporal distance from the experience: recent evaluations tend to focus on concrete aspects, while more distant evaluations emphasize abstract elements (Kyung *et al.*, 2014; Trope & Liberman, 2003). Understanding this dynamic supports the development of more effective satisfaction and loyalty strategies.

### 2.3 Customer Satisfaction

Satisfying a guest goes beyond meeting their basic needs; it involves delivering experiences that exceed expectations and align with personal preferences (Chon & Raymond, 2014; Ding & Keh, 2017; Maric et al., 2016). Despite the relevance of the topic, few studies have considered the influence of time on satisfaction evaluation based on psychological distance and Construal Level Theory (CLT) (Pizzi et al., 2015; Stamolampros & Korfiatis, 2018). In the context of tourism and hospitality, we found no studies that rely on psychological distance and CLT to explain past behavior; most focus on future behavior.

Although customer satisfaction is widely studied in marketing and hospitality literature, few works address it from the perspective of temporal distance. Most research related to CLT and psychological distance focuses on future decisions, such as purchase intention, product choice, or travel planning (Kim et al., 2008; Trope & Liberman, 2010). However, when it comes to retrospective judgments, that is, evaluations made after the consumption experience, a clear gap exists, especially in the service sector. Among the few relevant studies, two stand out as closely related to the purpose of this article: Pizzi et al. (2015), who investigated the influence of elapsed time across three types of experiences (a seminar, blood donation, and online movies), and Stamolampros & Korfiatis (2018), who analyzed online hotel reviews based on the time elapsed since the stay. Both studies show that consumer perception may shift with temporal distance. Nonetheless, there is still limited research that applies these approaches in a structured way within the hospitality context.

This study aims to fill that gap by examining how temporal distance affects the evaluation of satisfaction with lodging experiences. Based on this, we propose the following hypotheses:

H1a: Tangible attributes have a stronger effect on satisfaction in proximal evaluations.

H1b: Intangible attributes have a stronger effect on satisfaction in distal evaluations.

### 2.4 Word-of-mouth

Guests often share their travel, vacation, and lodging experiences, a practice known as word of mouth (WOM) (Li & Du, 2017). This sharing — whether positive or negative — can occur both online and offline (Cantallops & Salvi, 2014; Kim et al., 2016) and has a significant influence on the decisions of potential customers (Varkaris & Neuhofer, 2017). Therefore, guest feedback should be monitored and used to guide marketing strategies, attribute selection, and sales decisions, aligning products and services with consumer preferences.

Filieri et al. (2021) show that the attributes mentioned in online reviews vary in terms of perceived usefulness to other consumers. Some attributes appear more frequently in positive comments, while others dominate negative evaluations, suggesting a selective communication of experienced aspects. This selection may be related to how the experience is cognitively processed, considering the time elapsed since consumption. According to Schreurs and Hamstra (2020), apologies following negative WOM are more effective when they contain concrete information in proximal contexts and abstract information in distal ones - a pattern consistent with Construal Level Theory (Trope & Liberman, 2010).

These findings suggest that WOM content may vary according to the temporal distance from the experience. In recent evaluations, guests are more likely to mention tangible attributes; in evaluations made after a longer time, intangible attributes tend to be more prominent. Based on this, we propose the following hypotheses:

H2a: Tangible attributes have a stronger effect on WOM in proximal evaluations.

H2b: Intangible attributes have a stronger effect on WOM in distal evaluations.

### 2.5 Business and Leisure Travel

Segmenting leisure and business tourists is crucial for understanding their specific needs and improving satisfaction (Almeida & Pelissari, 2019; Kim & Park, 2017). Segmentation enables the development of personalized services, which can contribute to increased customer satisfaction and loyalty (Frochot & Morrison, 2001; Wong & Chi-Yung, 2002). Studies indicate that different market segments exhibit distinct profiles that influence their preferences and value perceptions (Kim & Park, 2017; Pesonen, 2013). Generally, leisure tourists tend to value experiences characterized by hedonism and escapism (Jiang et al., 2019), whereas business tourists prioritize efficiency and functionality (Westman et al., 2023), which is reflected in hotel marketing strategies and service delivery.

Research shows that traveler type and travel motivation, such as business or leisure, influence the relevance assigned to hotel choice attributes and satisfaction with lodging (Almeida & Pelissari, 2019; Kim & Park, 2017). Moreover, travel motivations and behaviors vary over time (Wong et al., 2018), which can lead to modification or intensification of certain attributes. Zhang et al. (2021) found that there is an intensification in the relevance of stimuli at the extremes to explain psychological distance in proximal and distal contexts. Kim et al. (2008) corroborate this finding by linking two psychological dimensions, and Stamolampros and Korfiatis (2018) by analyzing a triple interaction, achieving a better fit to explain mental interpretation.

Based on these findings, it is considered that leisure travelers tend to attribute greater value to abstract and hedonic aspects associated with intangible attributes, especially in evaluations made with greater temporal distance. In contrast, business travelers tend to prioritize functional and concrete attributes related to tangible attributes, particularly in evaluations made shortly after the stay. Based on these premises, the following hypotheses are proposed:

H3a: Tangible attributes have a stronger effect on satisfaction in business travel, especially when lodging evaluations occur close to the experience.

H3b: Intangible attributes have a stronger effect on satisfaction in leisure travel, especially when lodging evaluations occur distant from the experience.

Word of mouth (WOM) is influenced by various factors, such as social norms (Zhang et al., 2021), online and offline social networks (Kim et al., 2016; Li & Du, 2017; Varkaris & Neuhofer, 2016), cultural values and emotions (Wen

et al., 2018), expectations of reciprocity (Yang, 2018), and the interaction of psychological dimensions (Stamolampros & Korfiatis, 2018). Previous studies have explored the social aspects linked to WOM more extensively (Stamolampros & Korfiatis, 2018; Yang, 2018). According to Filieri et al. (2021), online reviews vary in usefulness depending on the attributes mentioned. Exploring the temporal dimension (Yang, 2018) is relevant to understanding whether attribute changes noted in other studies also occur due to time, as seen in studies like Ding & Keh (2017).

Previous studies have mainly focused on social factors influencing WOM (Stamolampros & Korfiatis, 2018; Yang, 2018). Filieri *et al.* (2021) demonstrate that the usefulness of online comments varies according to the attributes mentioned, emphasizing the importance of verifying whether temporality has an effect in similar contexts. This leads us to question whether changes in attribute importance due to temporality also occur in the context of WOM.

Based on these findings, we propose that WOM also varies according to temporal distance, and that the importance attributed to tangible and intangible attributes differs accordingly. Specifically, we believe that in proximal experiences, tangible attributes will have greater influence on WOM, whereas in more temporally distant situations, intangible attributes will gain greater relevance. Thus, our hypothesis is:

H4a: Tangible attributes have a stronger effect on WOM in business travel, especially when lodging evaluations occur close to the experience.

H4b: Intangible attributes have a stronger effect on WOM in leisure travel, especially when lodging evaluations occur distant from the experience.

Based on Psychological Distance Theory and Construal Level Theory, a theoretical model was developed proposing the variation of the influence of tangible and intangible attributes on satisfaction and WOM, according to temporal distance and purpose of the trip. This model is grounded on the premise that the more temporally distant the lodging experience, the greater the tendency for consumers to evaluate the experience based on abstract (intangible) aspects, while more recent evaluations tend to focus on concrete (tangible) aspects.

### 3 METHODOLOGY

### 3. 1 Preliminary Study

The preliminary study aimed to validate the variables related to tangible and intangible hotel attributes. The items were based on previously tested scales, with minor adaptations for this study (scales from Ding & Keh, 2017; Kocabulut & Albayrak, 2019; Ren et al., 2016; Stanujkic et al., 2019; Tan, 2018; Zoghbi-Manrique-de-Lara et al., 2014). In total, 56 items were evaluated and classified according to tangibility, following the approach of Ding and Keh (2017). For this validation, 7 academic experts<sup>1</sup> and 10 experienced hospitality managers<sup>2</sup> participated. Items were rated on a 7-point scale, where values close to 1 indicated tangibility and values near 7 indicated intangibility.

To select the items for the final survey, statistical calculations such as mean, mode, median, and standard deviation were used, with the aid of SPSS software. Fifteen items were selected for each independent variable (tangible/intangible). Table 1 presents the results of the selected items.

Table 1 - Tangible and Intangible Variables								
Nº	Scale	Category	Mode	Median	Standard Deviation	Mean		
1	Q9. The room facilities (such as TV, minibar, fan, air conditioning)	Tangible	1	1	0.332	1.118		
2	Q25. Comfortable and modern room furniture	Tangible	1	1	0.589	1.294		
3	Q5. Amenities (such as shampoo, soap)	Tangible	1	1	0.874	1.471		
4	Q6. Bathroom cleanliness	Tangible	1	1	1.227	1.588		
5	Q13. Room maintenance	Tangible	1	1	1.532	1.706		
6	Q38. Internal signage	Tangible	1	1	1.821	1.765		
7	Q14. Room size	Tangible	1	1	1.453	1.882		
8	Q54. Hotel location	Tangible	1	1	1.819	1.941		
		3						

<sup>&</sup>lt;sup>1</sup>Hold a PhD and be familiar with the relevant theories. A total of 9 academic experts were invited, with 7 participating.

<sup>&</sup>lt;sup>2</sup>Have a minimum of 5 years of experience in hospitality and hold a leadership position. Most of the experts were invited via LinkedIn. A total of 23 specialists were invited, with 10 participating.

Table 1 -	- Tangible and Intangible Variables					(conclusion)
N°	Scale	Category	Mode	Median	Standard Deviation	Mean
9	Q36. Efficient food replenishment and waiting time	Tangible	1	1	1.871	2
10	Q1. Room cleanliness	Tangible	1	1	1.713	2.059
11	Q30. Entertainment facilities (well-equipped)	Tangible	1	1	1.957	2.059
12	Q21. Common areas of the hotel (infrastructure)	Tangible	1	1	1.867	2.118
13	Q33. Meal quality	Tangible	1	1	1.764	2.118
14	Q56. Hotel surroundings (markets, restaurants, etc.)	Tangible	1	2	1.572	2.294
15	Q10. Wi-Fi functioning in the room	Tangible	1	1	2.178	2.353
16	Q18. Pleasant interaction with staff	Intangible	1	6	2.552	4.471
17	Q37. Restaurant environment	Intangible	7	4	2.401	4.471
18	Q51. Communication with staff	Intangible	7	5	2.401	4.529
19	Q50. Welcoming staff	Intangible	7	4	2.293	4.588
20	Q49. Helpful staff	Intangible	7	6	2.234	4.647
21	Q41. Speed, friendliness, efficiency, and proactivity during check-in	Intangible	7	5	2.469	4.706
22	Q48. Staff effectiveness in responses	Intangible	7	4	2.173	4.706
23	Q42. Speed, friendliness, efficiency, and proactivity during check-out	Intangible	7	5	2.513	4.765
24	Q53. Friendly, welcoming, hospitable, empathetic, and receptive staff	Intangible	7	6	2.386	4.765
25	Q47. Staff politeness	Intangible	7	6	2.058	5.118
26	Q22. Pleasant hotel	Intangible	7	6	2.157	5.176
27	Q15. A feeling of relaxation in the room	Intangible	7	6	2.2024	5.294
28	Q32. Memorable experience	Intangible	7	7	2.422	5.353
29	Q29. A feeling of relaxation in the hotel	Intangible	7	7	2.293	5.412
30	Q31. Felt at home	Intangible	7	7	2.348	5.471

Source: Author's elaboration.

### 3.2 Data Collection Instrument

After validating the tangible and intangible attributes, the main questionnaire was administered, incorporating the dependent variables: satisfaction and word of mouth (WOM), following the protocols of Lopes et al. (2019).

Satisfaction was measured using scales from Jung and Yoon (2012), Ren et al. (2016), and Zoghbi-Manrique-de-Lara et al. (2013), with 7 items. For WOM, the scales of Zoghbi-Manrique-de-Lara et al. (2014) and Wen et al. (2018) were used, also with 7 items.

The questionnaire, with an estimated completion time of 10 to 15 minutes, was divided into four sections: (1) Informed Consent Form (ICF); (2) sociodemographic questions; (3) lodging habits; and (4) perceptions about the most recent lodging experience. All variables were measured using a 7-point Likert scale.

### 3.3 Sample and Data Collection

The study included Brazilian participants over the age of 18 whose most recent hotel stay occurred within the past 24 months. Data collection was carried out through Inside Brasil3, an online national panel with over 500,000 Brazilian members. The aim was to gather responses from all five regions of Brazil, ensuring balanced sampling across them. The randomized administration of the scales and data processing followed the protocols recommended by Freire et al. (2017). A total of 482 valid responses were obtained.

<sup>&</sup>lt;sup>3</sup>Available at: <u>www.inside-brasil.com</u>

### 3.4 Data Analysis

Following the recommendations of Podsakoff *et al.* (2003), an initial exploratory factor analysis was conducted by forcing the extraction of a single factor to test for common method bias. All model variables, including the moderators, were included. The KMO and Bartlett's Test were not significant, and the total variance explained was 45.98% (below the 50% threshold), allowing the continuation of statistical analyses<sup>4</sup>.

To validate the model, structural equation modeling (SEM) was employed, a technique that combines aspects of factor analysis and multiple regression (Hair *et al.*, 2014). This approach allows for a variety of analyses given the interdependence between variables (Malhotra *et al.*, 2014). The theoretical model, created using the SmartPLS 3.0 software, included two independent variables (Tangible and Intangible Attributes), each with 15 items, and two dependent variables (Satisfaction and Word of Mouth), each with 7 items.

Finally, to test the proposed hypotheses, the sample was first divided into two groups and later into four groups. The data were analyzed using multigroup analysis (MGA).

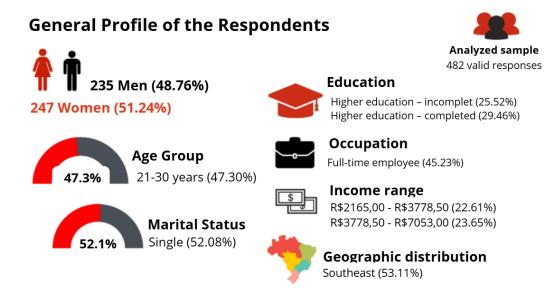
### **4 RESULTS AND DISCUSSION**

### 4.1 Respondents' Profile

Based on the 482 valid responses, we analyzed the sociodemographic profile of the sample, which showed a balanced gender distribution: 51.24% female and 48.76% male (summary in Figure 1). The predominant age group was adults between 21 and 40 years old, accounting for 78.1% of the participants. Among the respondents, 52.08% were single, 37.76% married, and the remaining 10.16% reported other marital statuses. Regarding educational level, most participants had at least completed high school: 29.46% held a university degree, 25.52% had incomplete higher education, and 22.61% had completed secondary education.

As for monthly household income, the largest proportions were: (1) between R\$3,778.50 and R\$7,053.00 (23.65%); (2) between R\$2,165.00 and R\$3,778.50 (22.61%); and (3) between R\$1,196.50 and R\$2,165.00 (20.33%). In terms of occupation, 45.23% of respondents were employed full-time, and 22.20% reported working and studying.

Figure 1 - Respondents' Profile

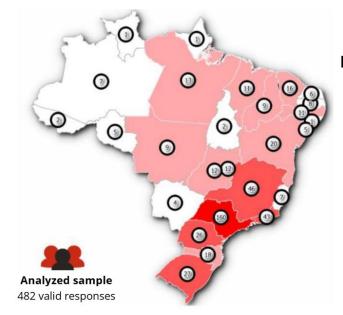


**Source**: Prepared by the author(s).

 $<sup>^4</sup>$ To validate the factor analysis, the KMO index should be greater than 0.50 to indicate data adequacy, and Bartlett's test should show significant correlations among the variables (p-value  $\le$  0.05). These criteria indicate whether the data are properly structured to allow consistent joint analysis (Field, 2009; Hair *et al.*, 2009).

Finally, to conclude the collection of sociodemographic data, we identified the respondents' place of residence, distributed across the Brazilian territory, as shown in Figure 2: 6.43% from the North, 18.05% from the Northeast, 7.68% from the Central-West, 53.11% from the Southeast, and 14.72% from the South.

Figure 2 - Distribution of respondents by region



Distribution by region

North (6.43%)

Northeast (18.05%)

Central-West (7.68%)

Southeast (53.11%)

South (14.72%)

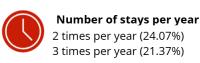
Source: Prepared by the author(s).

Regarding lodging, most respondents usually stay in hotels (37.3%) and inns (29.2%). They travel two (24.07%) to three times a year (21.37%). Most stays last for three days (33%), followed by two, four, and five days, each accounting for 15.8% of the sample (Figure 3).

Figure 3 - Guest Profile

# **Lodging habits**









### Travel habit x Last travel



### **Habitual choice**

No preference (29.3%) 4-star hotels (29.0%) 3-star hotels (28.4%)

**Last Travel** 

No preference (28.01%)



### Habit

Leisure (22%) Business (11.2%)

### Last Travel

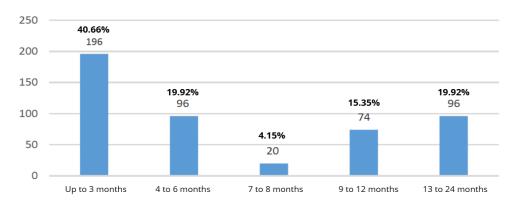
Leisure (29.25%) Business (66.6%)

Source: Prepared by the author(s).

Most respondents had stayed at a hotel within the past three months (40.66%), while 35.28% had done so nine months or more prior (Figure 4). Most guests (66.6%) reported leisure as the main reason for their trip (Figure 5).

Figure 4 - Lodging profile

### Distribution of stays by time period



**Source**: Prepared by the author(s).

Figure 5 - Main reason for the trip - Business versus Leisure

#### **Business or Leisure Trip?** 300 52.70% 254 250 200 150 20.54% 99 100 9.75% 7.05% 47 1.66% 4.15% 4.15% 34 50 20 20 8 0 (Business) 1 2 4 5 6 7 (Leisure)

**Source**: Prepared by the author(s).

Regarding the lodging category, most respondents stated that they do not pay attention to this information (28.01%), followed by those who stayed in 4-star hotels (27.8%) or 3-star hotels (27.18%). Finally, during their most recent trip, most respondents stayed for 2 to 3 nights.

### 4.2 Model Adjustment

To achieve convergent validity, we followed three steps: (1) inspection of factor loadings, (2) verification of the average variance extracted (AVE), and (3) evaluation of a set of parameters including Cronbach's Alpha (CA), Rho\_A, and Composite Reliability (CR). Factor loadings below 0.50 were eliminated (Malhotra *et al.*, 2014). The AVE, which indicates the average correlation among variables within the construct, was considered satisfactory when above 0.50 (Fornell & Larcker, 1981). We also analyzed CA, Rho\_A, and CR, which should be higher than 0.70 (Hair *et al.*, 2014; Ringle *et al.*, 2014). Accordingly, the following items were removed: Tangible\_9, Tangible\_10, Tangible\_11, Tangible\_13, Tangible\_14, and Tangible\_15.

Discriminant validity (DV) was assessed to verify the independence between constructs (Hair *et al.*, 2014), using cross-loadings and the Fornell-Larcker criterion (1981). According to this criterion, the highest factor loadings should be within their respective constructs. Consequently, the following items were removed: Tangible\_6; Intangible\_4; Intangible\_7; Intangible\_8; Intangible\_9; Intangible\_12; Intangible\_15; Satisfaction\_1; Satisfaction\_2; Satisfaction\_6; Satisfaction\_7; Word-Of-Mouth\_1; Word-Of-Mouth\_4; Word-Of-Mouth\_6; and Word-Of-Mouth\_7.

Table 2 presents the correlation matrix after the removal of these items, with the square roots of the AVEs on the diagonal, which are higher than the correlations between the constructs. The model achieved discriminant validity (DV). With these adjustments, we updated the convergent validity values in Table 3, all of which are above the recommended minimum.

Table 2 - Correlation matrix

	Word of Mouth	Intangible	Satisfaction	Tangible
Word-of-Mouth	0.792			
Intangible	0.591	0.824		
Satisfaction	0.760	0.627	0.841	
Tangible	0.621	0.635	0.656	0.713

**Source**: Prepared by the author(s).

Table 3 - Convergent Validity

	Cronbach's Alpha	Rho_A	cc	AVE
Word-of-Mouth	0.707	0.738	0.834	0.627
Intangible	0.941	0.944	0.950	0.679
Satisfaction	0.794	0.808	0.879	0.707
Tangible	0.859	0.867	0.891	0.509

**Source**: Prepared by the author(s).

Table 4 presents the dependent and independent variables used for the construction and validation of the theoretical model after establishing discriminant validity, showing the factor loadings of the variables.

Table 4 - Variables used in the model

Variable	Question	Factor loading
Tangible_1	The room facilities were good (TV, minibar, air conditioning)	0.792
Tangible_2	The bathroom was clean	0.753
Tangible_3	The room was clean	0.776
Tangible_4	The room furniture was comfortable and modern	0.740
Tangible_5	The maintenance of the room was good	0.786
Tangible_7	The Wi-Fi worked very well in the room	0.611
Tangible_8	The availability of amenities was good (e.g., shampoo, soap)	0.656
Tangible_12	The size of the room was adequate	0.550
Intangible_1	I had a pleasant interaction with the staff	0.844
Intangible_2	The check-in was very good; the staff were friendly, proactive, efficient, and agile	0.781
Intangible_3	The staff was effective in their responses	0.780
Intangible_5	I had good communication with the staff	0.841
Intangible_6	The staff welcomed me very well	0.875
Intangible_10	The check-out was very good; the staff were friendly, proactive, efficient, and agile	0.752
Intangible_11	The staff was friendly, welcoming, hospitable, empathetic, and receptive	0.871
Intangible_13	The staff was very helpful	0.857
Intangible_14	The staff was very polite	0.808
Satisfaction_3	I will consider this hotel my first choice for accommodation in the city	0.838
Satisfaction_4	I would stay at this hotel again, even if the price were slightly higher	0.819
Satisfaction_5	I will consider this hotel multiple times as accommodation in the coming years	0.865
Word-of-mouth_2	After the stay, I have said positive things about the hotel in online reviews	0.714
Word-of-mouth_3	I would say positive things about the hotel to strangers online through reviews or communities (e.g., TripAdvisor, official websites, social networks)	0.842
Word-of-mouth_5	After the stay, I recommended the hotel to friends, relatives, or people who asked me	0.814

**Source**: Prepared by the author(s).

### 4.3 Nomological Validity

After the adjustments, the structural model analysis began by examining the Pearson determination coefficients (R<sup>2</sup>) (Ringle *et al.*, 2014). The R<sup>2</sup> indicates the extent to which the variance in a set of independent variables explains the observed variance in a dependent variable (Hair *et al.*, 2009).

According to Ringle, Silva, and Bido (2014, p. 65), "R² values assess the portion of variance in endogenous variables that is explained by the structural model." Therefore, this measure indicates the quality of the fitted model. The same authors reinforce Cohen's (1988) classification, which suggests that in social and behavioral sciences, R² values correspond to effect sizes as follows: up to 2% is small, up to 13% is medium, and above 26% is large. Thus, the higher the R value, the greater the influence exerted by an independent variable on a dependent variable. Accordingly, the values shown in Table 5 indicate that the model demonstrates strong predictive power.

**Table 5** - Predictive power of the model

	R squared	Adjusted R-squared
Word-of-Mouth	0.451	0.448
Satisfaction	0.504	0.502

**Source**: Prepared by the author(s).

To test the relationships between variables, the bootstrapping resampling technique was employed with 5,000 subsamples, calculating t-values ( $t \ge 1.96$ ) for each path in the model (Hair *et al.*, 2014; Ringle *et al.*, 2014). The results showed that all relationships were significant, with t-values greater than 5.7 and p  $\le$  0.001, as presented in Table 6.

Table 6 - Bootstrapping

9					
Path	Beta (β)	Sample Mean	Standard Deviation (SD)	t-value	p- value
Intangible→Word-of- mouth	0.329	0.330	0.050	6.612	0.001
Intangible—Satisfaction	0.353	0.352	0.062	5.705	0.001
Tangible→Word-of-mouth	0.412	0.413	0.051	8.058	0.001
Tangible→Satisfaction	0.431	0.435	0.054	7.919	0.001

**Source**: Prepared by the author(s).

### **5 HYPOTHESIS TESTING AND ANALYSIS**

The theoretical model proposed that tangible and intangible attributes vary in importance in explaining satisfaction and intention of word of mouth of the guests, according to the distancing, temporal, and motivation for the trip (business or leisure).

To test hypotheses 1 and 2, the sample was divided into groups using multigroup analysis (MGA). The first group considered the time, with trips proximal (until 2 months, 139 people) and distal (the leave of 9 months, 170 people), regardless of the reason for the trip. The results are in Table 7.

Table 7 - MGA - Relationship among Model Variables

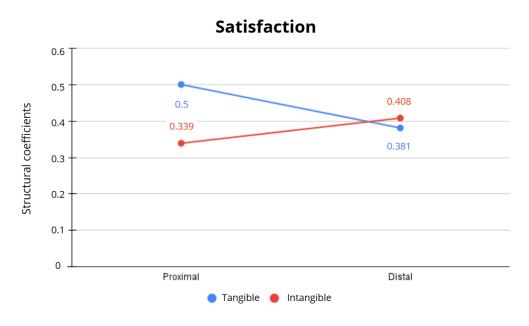
	Ве	etas			Standard	Deviation	t-va	alue
Constructs	Prox.	Distal	Prox.	Distal	Prox.	Distal	Prox.	Distal
Tangible→Satisfaction	0,500	0,381	0,101	0,078	4,951	4,915	0,001	0,001
Intangible→Satisfaction	0,339	0,408	0,132	0,072	2,565	5,660	0,010	0,001
Tangible→Word-of-mouth	0,538	0,310	0,080	0,090	6,682	3,433	0,001	0,001
Intangible→Word-of-mouth	0,229	0,453	0,096	0,077	2,388	5,913	0,017	0,001

Source: Prepared by the author(s).

The beta coefficients indicate a strong explanation for satisfaction and word-of-mouth. Hypothesis 1 tested the effect of time on attributes (tangible/intangible) in explaining satisfaction. In the proximal context, tangible elements ( $\beta = 0.500$ ) were stronger than intangible ones ( $\beta = 0.339$ ). In the distal context, intangible attributes ( $\beta = 0.408$ )

were stronger than tangible ones ( $\beta$  = 0.381). All t-values and p-values were significant, supporting the idea that tangible and intangible attributes explain satisfaction.

Figure 6 - Satisfaction H1



**Source**: Prepared by the author(s).

However, the hypothesis aimed to identify the existence of variation in the relevance of attribute types according to time and mental construal. As shown in Figure 6, there is a tendency, but with weak support for validation. We sought to advance by including statistical calculations performed using Daniel Soper's calculator5, with the results presented in Table 8.

 Table 8 - Test of Difference Between Betas: Proximal and Distal Conditions in Satisfaction

	TEST OF DIFFERENCE BETWEEN BETAS										
Proximal Condition	Beta	Standard Deviation	t-value	p-value	N	Degrees of Freedom					
$Tangible \to Satisfaction$	0.500	0.101	0.97	0.33	139	274					
Intangible → Satisfaction	0.339	0.132									
Distal Condition	Beta	Standard Deviation	t-value	p-value	N	Degrees of Freedom					
Tangible → Satisfaction	0.381	0.078	0.25	0.80	170	336					
Intangible → Satisfaction	0.408	0.072									

Source: Prepared by the author(s).

Neither in the distal context (t = 0.254; p = 0.799) nor in the proximal context (t = 0.969; p = 0.334) was there a statistically significant difference between the attributes in explaining satisfaction. Therefore, tangible and intangible attributes explain satisfaction equally in both contexts, leading to the rejection of H1.

Compared to Pizzi et al. (2015), who used controlled experiments and a field study in services within the distal context, intangibles ( $\beta$  = 0.453) were stronger than tangibles ( $\beta$  = 0.310). All beta values, t-tests, and p-values were significant (see Table 7).

Unlike lodging, our study may have been influenced by uncontrolled variables, such as other travel memories (despite our efforts to control for this by asking respondents to think about their most recent trip).

In comparison to Ding and Keh (2017), our research indicated only a tendency for tangibles to be stronger in the proximal context and intangibles in the distal context, but without statistical significance. This difference may reside

<sup>5</sup>https://www.danielsoper.com/statcalc/default.aspx

in the fact that post-consumption satisfaction with lodging is determined by a combination of tangible and intangible attributes, unlike the choice of services to be purchased, where the distinction between attributes may be more relevant.

H2 investigated the effect of time on tangible and intangible attributes in explaining word-of-mouth. Figure 7 shows that in a proximal context, tangible elements ( $\beta$  = 0.538) are stronger than intangible elements ( $\beta$  = 0.229). In the distal context, intangible attributes ( $\beta$  = 0.453) are stronger than tangible attributes ( $\beta$  = 0.310). All beta values, t-tests, and p-values were significant (see Table 7).

Word-of-Mouth (WOM) 0.6 0.453 0.538 Structural coefficients 0.4 0.3 0.229 0.31 0.2 0.1 0 Proximal Distal Tangible Intangible

Figure 7 - Word-of-mouth H2

Source: Prepared by the author(s).

The hypothesis aimed to identify variations in the relevance of attributes; we expected that in a proximal context, tangible attributes would be more relevant, and in the distal context, intangible attributes would be more relevant to explain word-of-mouth intention. Statistical calculations (Table 9) showed that in the distal context, results were not significant (t = 1.207; p = 0.228), but in the proximal context, they were significant at the 5% level (t = 2.473; p = 0.014). Therefore, in proximal evaluations, tangible attributes are stronger in explaining word-of-mouth, whereas in distal evaluations, there is no significant variation between attributes.

Table 9 - Test of Difference Between Betas: Proximal and Distal Conditions in Word-of-Mouth

TES	TEST OF DIFFERENCE BETWEEN BETAS - WORD-OF-MOUTH										
Proximal Condition	Beta	Standard Deviation	t-value	p-value	N	Degrees of Freedom					
Tangible → Word-of-mouth	0.538	0.101	2.473	0.014	139	274					
Intangible → Word-of-mouth	0.229	0.132									
Distal Condition	Beta	Standard Deviation	t-value	p-value	N	Degrees of Freedom					
Tangible → Word-of-mouth	0.31	0.09	1.207	0.228	170	336					
Intangible → Word-of-mouth	0.453	0.077									

Source: Prepared by the author(s).

This result contributes to understanding the effects of post-consumption word-of-mouth in services. Considering Ding and Keh (2017) and Filieri et al. (2021), we show that attributes are influenced by the moderation of time: in the distal context, guests rely more on intangible attributes, while in the proximal context, they focus more on tangible attributes. According to the results, in the proximal context, there is statistical evidence of a difference between the attributes. Thus, after a stay, guests consider tangible attributes more significant when sharing their experiences. Therefore, H2 was partially accepted.

To test hypotheses 3 and 4, we performed double moderation analyses (time and travel motivation). The temporal division remained the same: proximal up to 2 months and distal from 9 months onward. For travel motivation, we used a Likert scale, classifying as business (1-3) and leisure (5-7). We conducted MGA tests with 4 groups: Proximal\_Business (n=40), Proximal\_Leisure (n=93), Distal\_Business (n=49), and Distal\_Leisure (n=115). The obtained values are presented in Table 10.

Table 10 - Values Obtained in the MGA

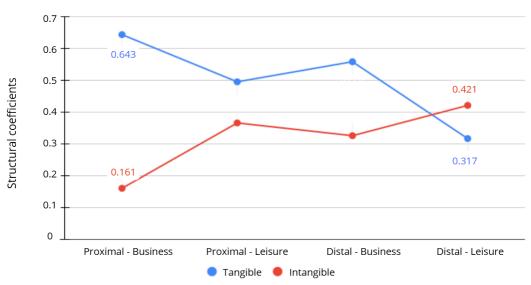
	MULTI-0	ROUP ANALYSIS (MGA)									
Proximal Condition_Business											
	Beta (β)	Standard Deviation	t-value	p- value	N						
Tangible→Satisfaction	0.643	0.228	2.819	0.005	5 40						
Intangible→Satisfaction	0.161	0.252	0.641	0.522	40						
Tangible→Word of mouth	0.669	0.138	4.834	0.001							
Intangible→Word of mouth	0.017	0.178	0.095	0.925							
	Proxin	nal Condition_Leisure									
	Beta (β)	Standard Deviation	t-value	p- value	N						
Tangible→Satisfaction	0.495	0.108	4.582	0.001	00						
Intangible→Satisfaction	0.366	0.146	2.502	0.012	93						
Tangible→Word of mouth	0.536	0.092	5.808	0.001							
Intangible→Word of mouth	0.271	0.109	2.498	0.013							
	Dista	l Condition_Business									
	Beta (β)	Standard Deviation	t-value	p- value	N						
Tangible→Satisfaction	0.558	0.095	5.901	0.001	40						
Intangible→Satisfaction	0.326	0.131	2.497	0.013	49						
Tangible→Word of mouth	0.530	0.169	3.128	0.002							
Intangible→Word of mouth	0.332	0.161	2.064	0.039							
	Dista	al Condition_Leisure									
	Beta (β)	Standard Deviation	t-value	p- value	N						
Tangible→Satisfaction	0.317	0.103	3.069	0.002	445						
Intangible→Satisfaction	0.421	0.092	4.576	0.001	115						
Tangible→Word of mouth	0.185	0.110	1.679	0.093							
Intangible→Word of mouth	0.517	0.099	5.221	0.001							

**Source**: Prepared by the author(s).

H3 aimed to complement H1 by adding travel motivation as a moderator to explain satisfaction, examining the interaction between temporal distance and travel motivation, which reflects the intensification of mental construal. According to Figure 8 and Table 10, the interaction in the proximal-business context is strong. The betas for tangible attributes ( $\beta$  = 0.643) are stronger than for intangible attributes ( $\beta$  = 0.161). However, tangible attributes-satisfaction were significant (p = 0.005), while intangible attributes-satisfaction were not significant (p = 0.522) in explaining the dependent variable in the proximal business context. Additionally, the statistical test showed that the relationship between proximal time and business travel motivation was not significant (t = 1.418; p = 0.160), as presented in Table 11.

Figure 8 - Satisfaction H3





Source: Prepared by the author(s).

Table 11 - Statistical Test of Beta Differences: Proximal and Distal Conditions for Satisfaction - Business and Leisure

	PROXIMAL_	BUSINESS CONDIT	ΓΙΟΝ			
Multi-Group Analysis (MGA)	Beta (β)	Standard Deviation	t-value	p- value	N	
Tangible→Satisfaction	0.643	0.228	2,819	0.005	40	
Intangible→Satisfaction	0.161	0.252	0.641	0.522	_	
Beta Difference Test	Beta (β)	Standard Deviation	t-value	p- value	N	Degrees of freedom
Satisfaction→Tangible	0.643	0.228	1,418	0.160	40	76
Satisfaction→Intangible	0.161	0.252				
	DISTAL_I	EISURE CONDITIO	N			
Multi-Group Analysis (MGA)	Beta (β)	Standard Deviation	t-value	p- value	N	
Tangible→Satisfaction	0.317	0.103	3,069	0.002	115	
Intangible→Satisfaction	0.421	0.092	4,576	0.001	-	
Beta Difference Test	Beta (β)	Standard Deviation	t-value	p- value	N	Degrees of freedom
Satisfaction→Tangible	0.317	0.103	0.75	0.45	115	226
Satisfação→Intangível	0.421	0.092	<del></del>			

Source: Prepared by the author(s).

The betas for tangible attributes were higher than those for intangible attributes; however, there was no statistical evidence supporting this difference. This result may have been influenced by (1) high standard deviation values (tangible SD = 0.228; intangible SD = 0.252) and (2) a small sample size (n = 40). Future studies should increase the sample size for business trips in the proximal context.

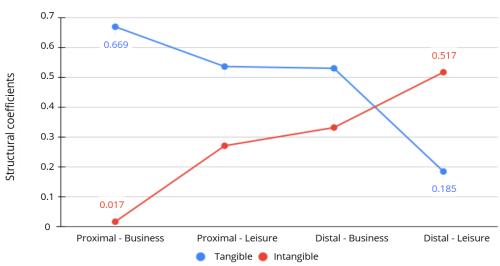
These findings are consistent with studies such as Zhang et al. (2021), advancing the literature by exploring the interaction between temporal distance and travel motivation and its influence on the relationship between tangible/intangible attributes and satisfaction. Although no statistically significant difference was found between the betas, it is important to highlight that the relationship between intangible attributes and satisfaction was not significant (p = 0.522), indicating that only tangible attributes explain satisfaction in the proximal-business context.

In the distal-leisure context, the beta for intangible attributes ( $\beta$  = 0.421) was higher than that for tangible attributes ( $\beta$  = 0.317). However, the values were closer compared to those in the proximal business context. The test of difference between betas in the distal-leisure context (t = 0.753; p = 0.452) was not significant. Despite the lack of

statistical difference in the distal-leisure context, it should be emphasized that only tangible attributes were significant in explaining satisfaction in the proximal-business context. Integrating the results from both contexts, hypothesis H3 is considered partially supported.

Figure 9 shows that, in the proximal-business context, the betas for tangible elements ( $\beta$  = 0.669) are stronger than for intangible ones ( $\beta = 0.017$ ). The t and p values for tangible attributes were significant (p = 0.001), while those for intangible attributes were not (p = 0.925) (see Table 10).

Figure 9 - Word of Mouth H4 Word-of-Mouth (WOM)



Source: Prepared by the author(s).

Additionally, the test for differences between betas showed statistical significance for the proximal-business context (t = 2.895; p = 0.005), accepted at the 5% level (Table 12). Thus, guests on business trips in a proximal context are more influenced by tangible attributes when engaging in word-of-mouth communication.

Table 12 - Statistical Test of Beta Differences: Proximal and Distal Conditions in Word-of-Mouth - Business and Leisure

PROXIMAL_BUSINESS CONDITION							
Multi-Group Analysis (MGA)	Beta (β)	Standard Deviation	t-value	p- value	N		
Tangible→Word of mouth	0.669	0.138	4,834	0.001	40		
Intangible→Word of mouth	0.017	0.178	0.095	0.925	_		
Beta Difference Test	Beta (β)	Standard Deviation	t-value	p- value	N	Degrees of freedom	
Word of mouth→Tangible	0.669	0.138	2.89	0.01	40	76	
Word of mouth→Intangible	0.017	0.178					
	DISTAL	_LEISURE CONDITI	ON				
Multi-Group Analysis (MGA)	Beta (β)	Standard Deviation	t-value	p- value	N		
Tangible→Word of mouth	0.185	0.11	1,679	0.093	115		
Intangible→Word of mouth	0.517	0.099	5,221	0.001	<del>-</del>		
Beta Difference Test	Beta (β)	Standard Deviation	t-value	p- value	N	Degrees of freedom	
Word of mouth→Tangible	0.185	0.11	2.24	0.03	115	226	
Word of mouth→Intangible	0.517	0.099					

**Source**: Prepared by the author(s).

Regarding the distal-leisure interaction in explaining word-of-mouth (WOM), Figure 9 shows that the betas for intangible attributes ( $\beta$  = 0.517) are higher than for tangible attributes ( $\beta$  = 0.185). The t and p values for intangible attributes were significant (p = 0.001), while tangible attributes were significant at the 10% level (p = 0.093), as

presented in Table 12. The statistical test (Table 12) indicates that the difference between the betas was significant at the 5% level (t = 2.243; p = 0.026), suggesting that leisure travelers in a distal context tend to engage in WOM primarily based on intangible elements. Thus, hypothesis H4 was confirmed.

This result corroborates the findings of Kim *et al.* (2008) in the hotel context, Stamolampros and Korfiatis (2017) in online evaluations of tourism experiences, and Zhang *et al.* (2021) regarding information sharing on social media, demonstrating that the interaction between variables is more effective in capturing the appropriate level of mental construal of the individual.

Finally, all studies in this second set present more consistent results in explaining the dependent variables when there is interaction between variables. By testing the interaction between temporal distance and travel motivation, this study advances the literature on Construal Level Theory (CLT) in explaining satisfaction and WOM post-stay.

Based on the presented results, it is observed that the interaction between temporal distance and travel motivation provides a more robust explanation for the effects of tangible and intangible attributes on guest satisfaction and WOM intention. The detailed analysis of the models and statistical tests enabled verification of some hypotheses and rejection of others, revealing important nuances about the cognitive processing of lodging experiences. To facilitate visualization of the main findings and consolidate the tests conducted, Table 1 below summarizes the results of all hypotheses tested in this study.

Frame 1 - Conclusion of the Hypotheses

Hypothesis	Conclusion
H1a: Tangible attributes have a stronger effect on satisfaction in proximal evaluations.	Rejected
H1b: Intangible attributes have a stronger effect on satisfaction in distal evaluations.	Rejected
H2a: Tangible attributes have a stronger effect on word-of-mouth in proximal evaluations.	Accepted
H2b: Intangible attributes have a stronger effect on word-of-mouth in distal evaluations.	Rejected
H3a: Tangible attributes have a stronger effect on satisfaction in business travel, especially when lodging evaluations occur close to the experience.	Accepted
H3b: Intangible attributes have a stronger effect on satisfaction in leisure travel, especially when lodging evaluations occur distant from the experience.	Rejected
H4a: Tangible attributes have a stronger effect on word-of-mouth in business travel, especially when lodging evaluations occur close to the experience.	Accepted
H4b: Intangible attributes have a stronger effect on word-of-mouth in leisure travel, especially when lodging evaluations occur distant from the experience.	Accepted

Source: Prepared by the author(s).

### **6 CONCLUSION**

This study aimed to advance the understanding of post-stay behavior based on psychological distance, Construal Level Theory (CLT), and travel motives. The research tested: (1) guests' perceptions of tangible and intangible attributes over time in explaining satisfaction and word-of-mouth; and (2) the interaction between temporal distance (proximal/distal) and travel motive (business or leisure) on this relationship. Additionally, we presented a distinction between relevant attributes as tangible and intangible, which represents a contribution compared to previous studies.

The tests and analyses demonstrated that word-of-mouth is explained by the differentiation of attributes over time. Overall, the results confirm the proposed hypotheses, showing that both the distinction between tangible and intangible attributes and the interaction between temporal distance and travel motive significantly influence the behavioral outcomes analyzed. The results of the first two hypotheses indicate that when evaluating past experiences from memory, there is no difference in the relevance of tangible and intangible elements in explaining future behavioral responses. However, when analyzing the interaction between temporal distance and travel motive, the results suggest a better fit regarding the level of mental construal. Thus, when the stay is recent (proximal) and the trip is for business, tangible elements are more relevant in explaining word-of-mouth, indicating a low level of mental construal. Conversely, as expected, when the stay occurred a long time ago (distal), intangible elements become more relevant in explaining behavior, indicating a high level of mental construal.

These findings reinforce the predictive value of the hypotheses, demonstrating how the joint application of psychological distance and travel purpose allows for a better understanding of how consumers evaluate past experiences and make decisions based on these memories. This process influences not only their satisfaction but also their

willingness to share positive feedback about their stay. Therefore, this research advances the literature on CLT by showing how the interaction between temporal distance and travel motivation affects satisfaction and post-stay word-of-mouth, highlighting the importance of considering these factors when assessing accommodation experiences.

### 6.1 Academic Implications

The theoretical foundation of this study was based on temporal distance theories and the Construal Level Theory (CLT), as well as segmentation by travel purpose, whether business or leisure. These topics have been underexplored in the tourism and hospitality literature, while related fields have advanced in this approach in recent years. The distinction between tangible and intangible attributes relevant to guests proved to be important. Other studies tend to address service tangibility collectively, without necessarily linking it to temporal distance and travel purpose.

This study corroborates findings such as those of Kim et al. (2008) in the hotel context, Stamolampros and Korfiatis (2018) in the context of online evaluations of tourism experiences, and Zhang et al. (2021) in the context of WOM sharing. These studies highlight the importance of measuring or stimulating the consumer-guest through multiple pathways, allowing them to engage in either low or high levels of mental construal. The results are consistently more robust when dual or triple interactions are incorporated into the analysis.

### 6.2 Managerial Implications

The results provide relevant insights for hospitality managers, particularly regarding guest experience management and post-service communication. By demonstrating that the perception of tangible and intangible attributes varies according to the time elapsed since the stay and the travel purpose (business or leisure), this research suggests that marketing and relationship strategies should be tailored based on these two factors.

Thus, customer segmentation can be performed considering the travel purpose and the time elapsed, enabling more personalized actions such as email marketing campaigns with adapted messages. For example, leisure travelers who stayed longer ago may receive communications that evoke emotions and affective memories, while more recent corporate clients may be targeted with messages emphasizing efficiency and tangible service differentiators.

Furthermore, loyalty programs can be optimized based on this understanding: for recurring business clients, it is recommended to highlight operational improvements and practical benefits. For leisure clients, investing in personalized experiences and symbolic reminders—such as special offers on commemorative dates or invitations to relive the experience—is advisable. Therefore, the research protocol and data collection instruments developed in this study can be used to guide resource allocation for promotional content.

In this way, the results contribute to practice by revealing that delight, loyalty, and client communication strategies should consider how the experience will be cognitively processed over time, as well as the predominant mindset depending on the travel purpose. Understanding the level of mental construal associated with different audiences and temporal contexts enables managers to act more precisely in stimulating brand recall and fostering ongoing customer relationships.

### 6.3 Research limitations and suggestions

Although the sample sought to cover the entire national territory and maintain regional proportionality, due to its non-probabilistic nature, the results cannot be generalized. Furthermore, data collection in the proximal context faced challenges, possibly intensified by the COVID-19 pandemic scenario, which resulted in low hotel occupancy rates. This difficulty in data collection impacted the sample size in the proximal business context, with only 40 respondents. Small samples tend to exhibit greater variability, which may have impaired the analysis of the relationship between variables, particularly in explaining satisfaction in the proximal business context.

Future studies should consider increasing the sample size to verify whether a larger number of respondents leads to more consistent results when analyzing the difference between tangible and intangible attributes in the proximal business travel context. Additionally, further research is encouraged to explore other dimensions of psychological distance, as this study focused exclusively on the temporal dimension to examine its effects on satisfaction and word-of-mouth.

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