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ESCALA DE EXPERIÊNCIA TURÍSTICA MEMORÁVEL: VERSÃO REDUZIDA E ADAPTADA PARA TURISTAS QUE VISITAM ILHAS

MEMORABLE TOURISM EXPERIENCE SCALE: REDUCED AND ADAPTED VERSION FOR TOURISTS VISITING ISLANDS

ESCALA DE EXPERIENCIA TURÍSTICA MEMORABLE: VERSIÓN ABREVIADA Y ADAPTADA PARA TURISTAS QUE VISITAN ISLAS

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## RESUMO

**Introdução:** As ilhas são destinos turísticos procurados pela sua autenticidade e características distintas, sendo essencial compreender as experiências memoráveis dos visitantes para o desenvolvimento de estratégias de marketing e gestão territorial.

**Objetivo:** Apresentar uma versão reduzida e adaptada da Escala de Experiência Turística Memorável (MTE) para turistas que visitam ilhas, validando-a em uma amostra de turistas seniores.

**Métodos:** Participaram 912 turistas seniores (com média de 64 anos) que visitaram a Ilha de São Miguel, nos Açores. A versão adaptada da MTE, composta inicialmente por 21 itens, foi submetida à análise fatorial exploratória (amostra A, n=485) e confirmatória (amostra B, n=457). Foram avaliadas a consistência interna, a fiabilidade composta e a invariância fatorial entre sexo e grupos etários.

**Resultados:** A versão final da escala integra 16 itens distribuídos por três dimensões: Serendipidade ( $\alpha=0,89$ ), Envolvimento ( $\alpha=0,83$ ) e Hospitalidade ( $\alpha=0,78$ ). O modelo tridimensional ajustado apresentou bons índices de ajustamento (CFI=0,92; TLI=0,90; RMSEA=0,084). A invariância fatorial foi confirmada para o sexo, mas não para os grupos etários.

**Conclusão:** A escala validada constitui um instrumento robusto para avaliar experiências turísticas memoráveis em contextos insulares, revelando-se útil para gestores de destinos e para o desenvolvimento de ofertas turísticas mais autênticas e emocionalmente significativas.

**Palavras-chave:** experiência turística memorável; turismo; ilhas; validação de escala; Açores

## ABSTRACT

**Introduction:** Islands are tourist destinations sought after for their authenticity and distinctive characteristics, and understanding visitors' memorable experiences is essential for developing marketing strategies and territorial management.

**Objective:** To present a reduced and adapted version of the Memorable Tourism Experience Scale (MTE) for tourists visiting islands, validating it in a sample of senior tourists.

**Methods:** A total of 912 senior tourists (mean age 64 years) who visited São Miguel Island in the Azores participated in the study. The adapted version of the MTE, initially composed of 21 items, was subjected to exploratory factor analysis (Sample A, n=485) and confirmatory factor analysis (Sample B, n=457). Internal consistency, composite reliability, and factorial invariance across gender and age groups were assessed.

**Results:** The final version of the scale comprises 16 items distributed across three dimensions: Serendipity ( $\alpha=0.89$ ), Involvement ( $\alpha=0.83$ ), and Hospitality ( $\alpha=0.78$ ). The adjusted three-dimensional model demonstrated good fit indices (CFI=0.92; TLI=0.90; RMSEA=0.084). Factorial invariance was confirmed for gender but not for age groups.

**Conclusion:** The validated scale constitutes a robust instrument for assessing memorable tourism experiences in island contexts, proving useful for destination managers and for developing more authentic and emotionally significant tourism offerings.

**Keywords:** memorable tourism experience; tourism; islands; scale validation; Azores

## RESUMEN

**Introducción:** Las islas son destinos turísticos buscados por su autenticidad y características distintas, siendo esencial comprender las experiencias memorables de los visitantes para el desarrollo de estrategias de marketing y gestión territorial.

**Objetivo:** Presentar una versión reducida y adaptada de la Escala de Experiencia Turística Memorable (MTE) para turistas que visitan islas, validándola en una muestra de turistas seniors.

**Métodos:** Participaron 912 turistas seniors (edad media de 64 años) que visitaron la Isla de São Miguel, Azores. La versión adaptada de la MTE, compuesta inicialmente por 21 ítems, fue sometida a análisis factorial exploratorio (muestra A, n=485) y análisis factorial confirmatorio (muestra B, n=457). Se evaluaron la consistencia interna, la fiabilidad compuesta y la invarianza fatorial entre sexo y grupos etarios.

**Resultados:** La versión final de la escala integra 16 ítems distribuidos en tres dimensiones: Serendipia ( $\alpha=0,89$ ), Involucramiento ( $\alpha=0,83$ ) y Hospitalidad ( $\alpha=0,78$ ). El modelo tridimensional ajustado presentó buenos índices de ajuste (CFI=0,92; TLI=0,90; RMSEA=0,084). La invarianza fatorial fue confirmada para el sexo, pero no para los grupos etarios.

**Conclusión:** La escala validada constituye un instrumento robusto para evaluar experiencias turísticas memorables en contextos insulares, resultando útil para gestores de destinos y para el desarrollo de ofertas turísticas más autênticas y emocionalmente significativas.

**Palabras clave:** experiencia turística memorable; turismo senior; islas; validación de escala; Azores

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## INTRODUCTION

Around the world, approximately 340,686 islands across five continents have been mapped, usually inhabited by a wide variety of plants and animals, often including humans (Sayre et al., 2019). Islands, often associated with notions of remoteness, separation, difference, and the exotic, have long been regarded as fascinating places-spaces of romance, adventure, fantasy, and otherness (Sharpley, 2012). However, Rontos et al. (2012) warn that when discussing island economies and societies, attention should be paid to the key characteristics associated with islands, namely smallness (in terms of land area, population, and GNP) and remoteness (reflecting the discontinuity of geographical space).

Despite these characteristics, islands have long been regarded as places for rest and relaxation, with tourists choosing them as holiday destinations due to their distinctive features (Parra-López & Martínez-González, 2018), often seeking the authenticity that is increasingly scarce on the mainland (Sharpley, 2012). In fact, several stakeholders recognize the importance of authenticity in tourist destinations as well as environmental sustainability, emphasizing the need to preserve these attributes (Medeiros et al., 2021). Moreover, recent studies indicate that the motivations of senior tourists visiting the Azores archipelago (comprising nine islands) include knowledge and personal enrichment, sociability and fun, identity exploration, and the search for well-being (Silva et al., 2018; Silva, Medeiros, Moniz, et al., 2021; Silva, Medeiros, Vieira, et al., 2021).

The emergence of experiential marketing and the growing emphasis on positive tourist experiences have become fundamental in the fields of marketing, hospitality, and tourism (Knobloch et al., 2014). These authors argue that positive experiences have not been clearly defined, noting that the meanings and characteristics of terms such as “memorable,” “extraordinary,” “special,” and “peak” are problematic, as the nature of the experiences to which they refer can vary considerably. Based on interviews with tourists, the authors examined the nature of tourists’ experiences and perceptions, finding that participants associated different meanings with each term and that certain experiences stand out in memory for different reasons. In this sense, a new approach is needed to examine tourist experiences, one that emphasizes their multidimensional nature as well as the importance of emotional aspects.

Moreover, the imprecise use of terminology by researchers, together with limitations in understanding the nature of tourist experiences, may constitute an important limitation. Therefore, researchers should adopt clearer conceptual distinctions and explicitly acknowledge how specific terms shape and define research outcomes. The Senior Tourism project *Wellness Routes and Local Experiences in an Island Ecosystem* (TURIVIVA+), within which this study is integrated, aims, among other objectives, to examine the overall well-being, level of satisfaction, positive emotional experiences, involvement with the island ecosystem of São Miguel Island, and the recommendations or suggestions expressed by senior tourists visiting the island.

Despite the widespread use of Memorable Tourism Experiences (MTE) scales in the literature, important limitations remain when these instruments are applied across different cultural and linguistic contexts. Many existing scales were originally developed and validated within specific settings, which may compromise their conceptual equivalence and validity in other populations. Furthermore, sociocultural differences can influence how individuals perceive and evaluate their tourism experiences, aspects that may not be fully captured by existing measures. Therefore, the adaptation and validation of MTE scales in new contexts are necessary to ensure their reliability, validity, and contextual appropriateness, thus providing the rationale for the present study.

## 1. THEORETICAL FRAMEWORK

Affection, expectations, consequentiality, and remembrance are considered fundamental dimensions of memorable experiences (Tung et al., 2017) and have a significant impact on both destination image and tourists’ intention to revisit (Hu & Shen, 2021). Throughout their trips, tourists often express gratitude for the fulfilment of their plans or for experiences that exceed their expectations (Tung et al., 2017). However, co-creation can influence the ability to form lasting memories, directing tourists’ attention in specific ways (Campos et al., 2016).

Memorable experiences are shaped by a variety of factors that can render a particular moment more meaningful and lasting (Kim et al., 2012; Wei et al., 2019). Kim et al. (2012) identify factors such as involvement, hedonism, happiness, pleasure, relaxation, stimulation, refreshment, social interaction, spontaneity, meaningfulness, knowledge, challenge, sense of separation, timelessness, adventure, personal relevance, novelty, escape from pressure, and intellectual cultivation as key contributors to memorable experiences. These authors further argue that the existing tourism literature provides a limited understanding of the factors that characterize memorable tourist experiences.

In recent years, the concept of co-creation has gained increasing attention in tourism research as a key process through which experiences are jointly constructed by tourists and service providers. Rooted in the service-dominant logic, co-creation emphasises the active role of tourists in shaping their own experiences through interactions with the destination environment, local communities, and other stakeholders (Leal et al., 2022). This perspective shifts the understanding of tourism experiences from passive consumption to active engagement, suggesting that the memorability of an experience is not only determined by its

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attributes but also by the degree of personal involvement and meaning-making processes. Despite the growing body of research on Memorable Tourism Experiences (MTEs), important methodological limitations remain, particularly regarding their measurement. Existing MTE scales, such as that proposed by Kim et al. (2012), have been widely applied across different contexts; however, they were originally developed within specific cultural settings, raising concerns about their conceptual and semantic equivalence when used in other contexts. Moreover, limited attention has been given to issues of measurement invariance and contextual sensitivity, especially in tourism settings characterised by strong place-based interactions, such as island destinations. Kim and Jang (2016) argue that destinations are increasingly seeking to provide memorable tourist experiences, thereby ensuring that tourists retain lasting memories of their visits. For example, Alonso and Liu (2011) found that the gastronomy and wines of the Canary Islands (Spain) have become iconic elements of these regions. Studies conducted on Liuqiu Island (Taiwan) indicate that nature-based tourism can provide leisure experiences that enhance tourist involvement and contribute to positive outcomes in sustainable tourism (Lee et al., 2015); additionally, tourists can be segmented according to their recreational experiences (Lee et al., 2018).

DiPietro and Peterson (2017) analysed cruise destination experiences in the Dutch Caribbean (Aruba), finding that the overall destination experience significantly affects tourist loyalty. Similarly, Moon and Han (2018) explored trip satisfaction and intention to revisit Jeju Island (China), concluding that the quality of the experience plays a critical role in tourist satisfaction and encourages return visits. Oliveira et al. (2019) identified volcanic craters and landscapes as natural features that, when enriched by interaction with local communities, become highly relevant for tourists visiting Santo Antão and Fogo Island (Cape Verde). Finally, a study on Mentawai Island (Indonesia) demonstrated that memorable experiences significantly influence tourists' intentions to revisit or recommend the destination (Elfiondri et al., 2019).

In this context, the present scale may prove relevant for the co-creation of memorable experiences when applied to island destinations.

## 2. METHODS

### 2.1 Procedures

Taking into account the Memorable Tourism Experience (MTE) framework proposed by Coelho and Gosling (2018) and the need to develop a scale to evaluate the memorable experiences of senior tourists visiting São Miguel Island, a Focus Group was convened, consisting of six researchers from diverse fields (e.g., psychology, biology, sociology, statistics, and history). The 41 items comprising the MTE were analysed and discussed in depth. The research team then selected items that would best capture the memorable experiences of senior tourists, ultimately adapting 21 MTE items for this population. The study was submitted to the Ethics Committee of the University of the Azores and received approval (reference no. 06/2022). Given that modifications were made to the original MTE items, the total sample of 912 senior tourists was randomly divided into two subsamples: Sample A (n = 485) for exploratory factor analysis and Sample B (n = 457) for confirmatory factor analysis.

### 2.2. Instruments

A questionnaire was developed to collect information on the sociodemographic characteristics of the participants, including age, gender, marital status, level of education, and physical limitations. The questionnaire also gathered details related to their trip, such as the type of hotel, travel companions, method of reservation, and type of accommodation.

#### 2.2.1. Memorable Tourism Experiences

The Memorable Tourism Experience (MTE) scale was developed by Coelho and Gosling (2018). It consists of 41 items assessing tourists' experiences related to the environment, culture, interpersonal relationships, and psychological perceptions. Responses are measured on a seven-point Likert scale, ranging from 1 ('strongly disagree') to 7 ('strongly agree').

#### 2.2.2. Satisfaction with Life Scale (SWLS)

The Satisfaction with Life Scale was developed by Diener et al. (1985) and adapted for the Portuguese population by Simões (1992). The scale consists of five items that assess overall life satisfaction, using a five-point Likert scale ranging from 1 ('strongly disagree') to 5 ('strongly agree').

### 2.3 Participants

A total of 912 senior tourists participated in this study, with a mean age of 64.02 years (SD = 7.15). Of these, 455 participants identified as male, 447 as female, and 10 did not report their gender. Table 1 presents additional sociodemographic characteristics and travel-related information.

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**Table 1** - Socio-demographic, economic, and travel characteristics of a sample of 912 senior tourist participants in the study, recruited at São Miguel Island, Azores

	Frequencies	
	n	%
<b>Marital status</b>		
Married	645	70.7
Single	74	8.1
Divorced	69	7.6
Widower	66	7.2
De facto union	16	0.7
No answer	42	4.6
<b>Being retired</b>		
Yes	424	46.5
No	469	51.4
No answer	19	2.1
<b>Education level</b>		
Up to 4th class	76	8.3
9th grade	104	11.4
Secondary education or equivalent	141	15.5
Technical or medium course	81	8.9
Bachelor	114	12.5
License degree	186	20.4
Master's degree	144	15.8
PhD	57	6.3
No answer	9	1
<b>Economic income</b>		
Live very well	205	22.5
Live comfortably	509	55.8
You can live	173	19
Living with difficulties	12	1.3
Living with many difficulties	3	0.3
No answer	10	1.1
<b>With whom you traveled</b>		
In a group organized by a travel agency	180	19.7
With small group friends	124	13.6
With family	282	30.9
With a spouse	291	31.9
Alone	32	3.5
No answer	3	0.3
<b>How you booked the trip</b>		
Travel agency	334	36.6
Internet	437	47.9
Through a family member/friend	130	14.3
No answer	11	1.2
<b>Type of accommodation</b>		
Hotel	584	64
Local accommodation	204	22.4
Rural tourism	28	3.1
Friends/family house	63	6.9
Other type of accommodation	9	1
No answer	24	2.7
<b>Use a guide</b>		
Yes	254	27.9
No	645	70.7
No answer	13	1.4
<b>Visited the Azores before</b>		
Yes	309	33.9
No	596	65.4
No answer	7	0.8

Most participants reported having no physical limitations (88.4%). Regarding transportation used in the Azores, 66.7% indicated that they rented a car, 13.7% used non-adapted tour buses, 7.7% used adapted tour buses, and 11% used other types of transport.

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## 2.4. Statistical Analyses

Several statistical analyses were conducted using IBM SPSS for Macintosh, version 31 (Armonk, New York, NY, USA), to calculate the Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity, as well as Cronbach's alpha for the scales, including values for the entire scale, the respective dimensions, and item-total correlations. IBM SPSS AMOS for Windows, version 30 (Armonk, NY, USA), was used to evaluate the different structural equation models (SEM).

## 3. RESULTS AND DISCUSSION

### 3.1 Exploratory Factor Analysis (Sample A, n = 485)

#### 3.1.1 Reliability

The adapted MTE, composed of 21 items, demonstrated variable homogeneity (KMO = 0.94), indicating that the sample was suitable for analysis. Bartlett's Test of Sphericity ( $X^2(210) = 5481.709, p < 0.001$ ) confirmed that the variables were sufficiently correlated. In the present study, the 21-item scale showed excellent internal consistency (Cronbach's  $\alpha = 0.94$ ). However, analysis of the proportion of common variance revealed that some items had communalities below 0.50, which were considered unsatisfactory (Matos & Rodrigues, 2019). These items were therefore eliminated, as shown in Table 2.

**Table 2.** Items selected by extracting the communities for the scale of memorable experiences of tourists visiting the islands

	Extracting
MTE1. The walks I gave to see the landscapes were sensational.	0.398*
MTE2. Contact with local people was enriching.	0.741
MTE3. I was pleased with the hospitality of the local population.	0.784
MTE4. This trip was a dream come true.	0.588
MTE5. I had a lot of fun on this trip.	0.502
MTE6. I did things on this trip that I had never experienced before.	0.566
MTE7. I did something with deep meaning.	0.612
MTE8. The places I visited will be unforgettable.	0.651
MTE9. I realized the cultural diversity of the island.	0.492*
MTE10. I realized the biological diversity of the island.	0.610
MTE11. I was very well attended at the establishments I visited.	0.510
MTE12. This new experience filled me with positive emotions.	0.593
MTE13. It was a very unique/special experience in my life.	0.690
MTE14. I did something that left a deep impression on me.	0.691
MTE15. I often remember the places I visited.	0.364*
MTE16. I experienced the local culture up close.	0.488*
MTE17. I felt very welcome during the trip and stay.	0.570
MTE18. I lived this trip like a big dream.	0.704
MTE19. I felt great on the trip.	0.547
MTE20. I was surprised by what I experienced during the trip.	0.570
MTE21. With this trip, in summary, I learned a lot about myself.	0.607

\* Items deleted due to community values of less than 0.50

After the elimination of four items, a second factor analysis was conducted using principal component extraction with varimax rotation. The results indicated continued variable homogeneity (KMO = 0.936;  $X^2(136) = 4501.436, p < 0.001$ ), confirming that the sample remained suitable for analysis.

The rotated component matrix revealed the presence of three factors. It should be noted that item 5 did not load on any of the components, resulting in a final scale of 16 items. Items 4, 6, 7, 13, 14, 18, and 21 comprise the first factor, labelled "Serendipity." Chandralal et al. (2015) describe serendipity as the positive and memorable feeling arising from unplanned experiences and surprises during a trip. Items 8, 10, 12, 19, and 20 form the second factor, labelled "Involvement," which is defined as the extent to which tourists engage with an activity and how their affective responses are elicited by the experience (Gursoy & Gavcar, 2003). Finally, items 2, 3, 11, and 17 constitute the "Hospitality" factor, defined by Camargo (2019) as a process of interaction in domestic, urban, commercial, or virtual contexts, in which the host receives, accommodates, entertains, and provides for a visitor displaced from their usual environment for a period of time. The 16-item MTE demonstrated excellent internal consistency (Cronbach's  $\alpha = 0.92$ ). However, as noted by Marôco and Garcia-Marques (2006), the validity of this measure has been questioned, and it is therefore recommended that composite reliability be assessed.

#### 3.1.2 Construct reliability

To assess whether the items consistently represent their underlying latent factors, composite reliability was calculated ( $\widehat{FC}$ ). The construct reliability was found to be satisfactory for all three dimensions: Serendipity ( $\widehat{FC} = 0.89$ ); Involvement ( $\widehat{FC} = 0.83$ );

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Hospitality ( $\widehat{FC} = 0.78$ ). According to Marôco (2021) a  $\widehat{FC}$  value greater than 0.70 is generally considered an indicator of adequate construct reliability.

**3.2. Confirmatory Factor Analysis (Sample B, n = 457)**

**3.2.1. Memorable Tourism Experience Models with Structural Equation**

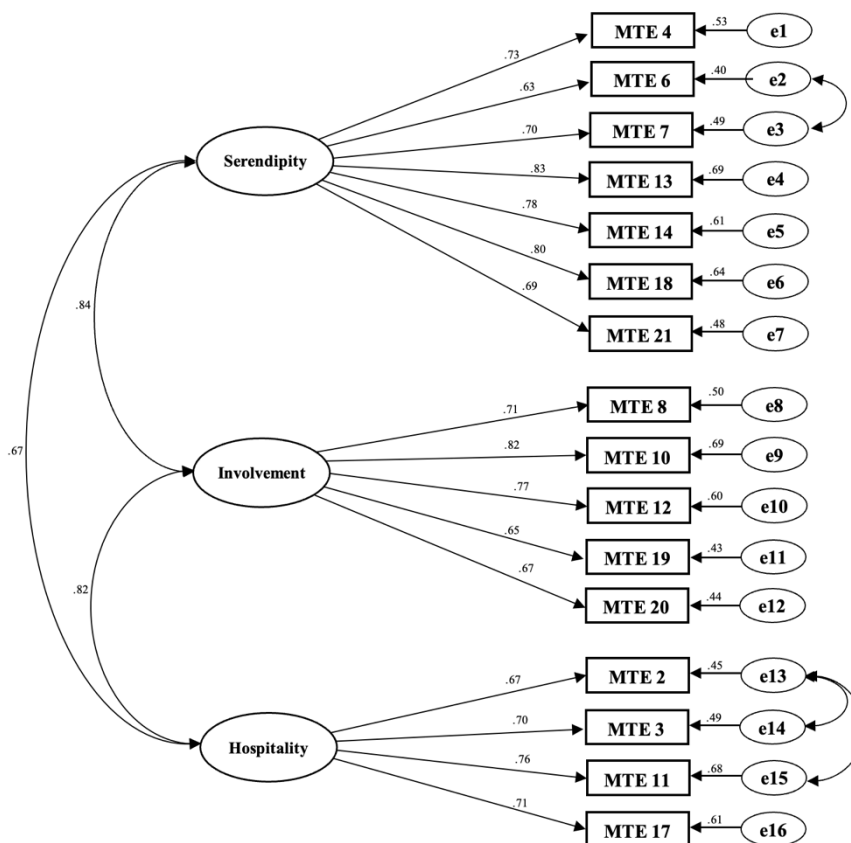
The MTE consists of 16 items divided into three dimensions representing memorable experiences. The one-dimensional model of the MTE showed a poor fit, although the regressions and variances of all items were significant ( $p < 0.001$ ). Therefore, a three-dimensional model was analyzed, which demonstrated a better fit (Table 3). This model was subsequently respecified based on the highest covariances identified through the modification indices.

**Table 3 - Evaluation of the Quality of the Factor Model**

Model Type	Quality of the factorial model
1 Unidimensional	$\chi^2(104) = 835.091; p < 0.001, \chi^2/df = 8.030; CFI = 0.81; TLI = 0.78; GFI = 0.77; RMSEA = 0.124, p < 0.001$ SRMR = 0.079
2 Three-dimensional	$\chi^2(101) = 485.038; p < 0.001, \chi^2/df = 4.802; CFI = 0.899; TLI = 0.881; GFI = 0.882; RMSEA = 0.091, p < 0.001$ SRMR = 0.059
4 Three-dimensional adjusted	$\chi^2(98) = 409.951; p < 0.001, \chi^2/df = 4.183; CFI = 0.92; TLI = 0.90; GFI = 0.90; RMSEA = 0.084, p < 0.001$ SRMR = 0.055

Note:  $\chi^2/df$  = chi-square/degrees of freedom; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; Goodness of Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual.

Figure 1 shows that, after refining the model by allowing error covariances between items 2–3, 13–14, and 13–15, a better model fit was obtained:  $\chi^2(98) = 409.951, p < 0.001, \chi^2/df = 4.183, CFI = 0.92, TLI = 0.90, GFI = 0.90,$  and  $RMSEA = 0.084, p < 0.001$ .



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**Figure 1-** Confirmatory Factor Analysis of the Memorable Tourism Experience  $\chi^2(98) = 409.951$ ;  $p < 0.001$ ,  $\chi^2/df = 4.183$ ; CFI = 0.92; TLI = 0.90; GFI = 0.90; RMSEA = 0.084,  $p < 0.001$ .

### 3.3 Measurement Invariance (Sample A and Sample B, N=942)

One of the advantages of confirmatory factor analysis is the possibility of evaluating the invariance of the structure and parameters of a given instrument across different groups. In this context, categorical variables were created to perform invariance tests for sex (men vs. women) and age class (Empty Nesters, Young Seniors, and Seniors). The invariance testing procedure began with the estimation of the confirmatory factor analysis model separately for each group to ensure that the model demonstrated an adequate fit. Measurement invariance was then tested by examining the equality of item factor loadings across groups (metric invariance) and the equality of item intercepts (scalar invariance).

#### 4.3.1 Invariance analysis in gender

The sex-adjusted configural model demonstrated an acceptable fit to the data:  $\chi^2(196) = 776.011$ ,  $p = 0.002$ , CFI = 0.919, TLI = 0.901, RMSEA = 0.057, 90% CI [0.053, 0.062], and SRMR = 0.057. The metric invariance model also showed a comparable fit:  $\chi^2(209) = 793.496$ ,  $p = 0.011$ , CFI = 0.919, TLI = 0.907, RMSEA = 0.056, 90% CI [0.052, 0.060], and SRMR = 0.057.

Following the recommended criterion of  $\Delta CFI \leq 0.01$  (Cheung & Rensvold, 2002), the results indicated that the imposition of equality constraints did not significantly deteriorate model fit ( $\Delta\chi^2 = 17.485$ ,  $\Delta CFI = 0.00$ ), supporting metric invariance across gender.

Scalar invariance was subsequently tested to assess whether item intercepts were equivalent across groups. The scalar model also demonstrated an acceptable fit:  $\chi^2(222) = 803.337$ ,  $p = 0.052$ , CFI = 0.919, TLI = 0.914, RMSEA = 0.054, 90% CI [0.050, 0.058], and SRMR = 0.057. Changes in model fit indices were negligible ( $\Delta\chi^2 = 9.841$ ,  $\Delta CFI = 0.00$ ), indicating that scalar invariance was supported.

#### 4.3.2 Invariance analysis in age group

The adjusted configural model for the age groups showed an acceptable fit to the data:  $\chi^2(294) = 934.815$ ,  $p < 0.001$ , CFI = 0.91, TLI = 0.89, RMSEA = 0.049, 90% CI [0.045, 0.053], and SRMR = 0.047. The metric model presented a slightly different fit:  $\chi^2(320) = 987.910$ ,  $p = 0.83$ , CFI = 0.91, TLI = 0.89, RMSEA = 0.048, 90% CI [0.051, 0.073], and SRMR = 0.047. Considering the commonly used criterion of  $\Delta CFI \leq 0.01$ , the  $\chi^2$  difference test and the  $\Delta CFI$  results indicate a significant decrease in model fit following the imposition of equality constraints ( $\Delta\chi^2 = 53.095$ ,  $\Delta CFI = 0.04$ ), suggesting the absence of metric invariance.

Scalar invariance was then tested to examine whether item intercepts were invariant across the age groups (Empty Nesters, Young Seniors, and Seniors). The scalar model results  $\chi^2(349) = 1023.699$ ,  $p = 0.97$ , CFI = 0.909, TLI = 0.906, RMSEA = 0.046, 90% CI [0.043, 0.049], and SRMR = 0.047 suggest that the assumption of scalar invariance is not supported ( $\Delta\chi^2 = 35.789$ ,  $\Delta CFI = 0.01$ ). Therefore, the factorial structure and the indicator intercepts were not found to be equivalent across the age groups in this sample of senior tourists.

## CONCLUSION

This study aimed to develop and validate a shortened and adapted version of the Memorable Tourism Experience (MTE) Scale specifically for tourists visiting islands, using a sample of 912 senior tourists who visited São Miguel Island in the Azores. Both exploratory and confirmatory factor analyses supported a three-dimensional structure comprising 16 items, distributed across the dimensions of Serendipity, Involvement, and Hospitality. The scale demonstrated robust psychometric properties, with satisfactory internal consistency and construct validity, as evidenced by composite reliability and model fit indices.

The Serendipity dimension highlights the importance of unexpected and surprising experiences in shaping positive tourist memories. The Involvement dimension emphasizes the role of emotional engagement and immersion in tourism activities, while the Hospitality dimension underscores the significance of interactions with the local community and the quality of reception in shaping overall experiential perceptions. Measurement invariance testing indicated that the factor structure is equivalent across genders but not across age groups, suggesting that perceptions of memorable experiences may vary at different stages of senior life. This finding warrants further investigation and should be considered when designing tourism marketing strategies targeting diverse senior tourist profiles.

From a practical perspective, the validated scale provides a valuable tool for island destination managers, allowing them to assess the quality of experiences offered and to identify key dimensions that influence visitor satisfaction and loyalty. Additionally, it supports the development of more authentic, personalized, and emotionally meaningful tourism offerings. Limitations of the study

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include the focus on senior tourists and a specific island context (the Azores). Future research should consider applying the scale in other island destinations, across different age cohorts, and through longitudinal designs to examine the stability of tourist memories over time.

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## AUTHORS' CONTRIBUTION

Conceptualization, J.M. and T.M.; data curation, J.M.; formal analysis, J.M.; investigation, J.M. and T.M.; methodology, J.M. and T.M.; resources, J.M.; software, J.M.; supervision, T.M.; validation: J.M. and T.M.; visualization, J.M. and T.M.; writing – original draft, J.M.; writing – review & editing, J.M. and T.M.

## CONFLICT OF INTERESTS

The authors declare no conflict of interests.

## REFERENCES

- Alonso, A. D., & Liu, Y. (2011). The potential for marrying local gastronomy and wine: The case of the "fortunate islands". *International Journal of Hospitality Management*, 30(4), 974–981. <https://doi.org/10.1016/j.ijhm.2011.02.005>
- Camargo, L. O. D. L. (2019). Hospitalidade, turismo e lazer. *Revista Brasileira de Pesquisa em Turismo*, 13(3), 1–15. <https://doi.org/10.7784/rbtur.v13i3.1749>
- Campos, A. C., Mendes, J., Do Valle, P. O., & Scott, N. (2016). Co-Creation experiences: Attention and memorability. *Journal of Travel & Tourism Marketing*, 33(9), 1309–1336. <https://doi.org/10.1080/10548408.2015.1118424>
- Chandralal, L., Rindfleish, J., & Valenzuela, F. (2015). An application of travel blog narratives to explore memorable tourism experiences. *Asia Pacific Journal of Tourism Research*, 20(6), 680–693. <https://doi.org/10.1080/10941665.2014.925944>
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 9(2), 233–255. [https://doi.org/10.1207/S15328007SEM0902\\_5](https://doi.org/10.1207/S15328007SEM0902_5)
- Coelho, M. de F., & Gosling, M. de S. (2018). Memorable tourism experience (MTE): A scale proposal and test. *Tourism & Management Studies*, 14(4), 15–24. <https://doi.org/10.18089/tms.2018.14402>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. [https://doi.org/10.1207/s15327752jpa4901\\_13](https://doi.org/10.1207/s15327752jpa4901_13)
- DiPietro, R. B., & Peterson, R. (2017). Exploring cruise experiences, satisfaction, and Loyalty: The Case of Aruba as a Small-Island Tourism Economy. *International Journal of Hospitality & Tourism Administration*, 18(1), 41–60. <https://doi.org/10.1080/15256480.2016.1263170>
- Elfiondri, Zaitul, Pratimaratri, U., Kartika, D., & Amril, O. (2019). Indigenous tradition based-tourism development: Foreign tourist's memorable tourism experience in Mentawai, Indonesia. *Humanities & Social Sciences Reviews*, 7(6), 402–410. <https://doi.org/10.18510/hssr.2019.7665>
- Gursoy, D., & Gavcar, E. (2003). International leisure tourists' involvement profile. *Annals of Tourism Research*, 30(4), 906–926. [https://doi.org/10.1016/S0160-7383\(03\)00059-8](https://doi.org/10.1016/S0160-7383(03)00059-8)
- Hu, F., & Shen, H. (2021). Memorable tourism experiences, destination image, satisfaction, and revisit intention of chinese outbound tourists to south pacific islands. In J. S. Chen (Ed.), *Advances in hospitality and leisure* (pp. 103–128). Emerald Publishing Limited. <https://doi.org/10.1108/S1745-354220210000017006>
- Kim, J.-H., & Jang, S. (Shawn). (2016). Memory retrieval of cultural event experiences: Examining internal and external influences. *Journal of Travel Research*, 55(3), 322–339. <https://doi.org/10.1177/0047287514553058>
- Kim, J.-H., Ritchie, J. R. B., & McCormick, B. (2012). Development of a scale to measure memorable tourism experiences. *Journal of Travel Research*, 51(1), 12–25. <https://doi.org/10.1177/0047287510385467>
- Knobloch, U., Robertson, K., & Aitken, R. (2014). (Mis)Understanding the nature of tourist experiences. *Tourism Analysis*, 19(5), 599–608. <https://doi.org/10.3727/108354214X14116690097891>

DOI: <https://doi.org/10.29352/mill0230.45929>

- Lee, T. H., Jan, F.-H., & Huang, G. W. (2015). The influence of recreation experiences on environmentally responsible behavior: The case of Liuku Island, Taiwan. *Journal of Sustainable Tourism*, 23(6), 947–967. <https://doi.org/10.1080/09669582.2015.1024257>
- Lee, T. H., Jan, F.-H., Tseng, C. H., & Lin, Y. F. (2018). Segmentation by recreation experience in island-based tourism: A case study of Taiwan's Liuku Island. *Journal of Sustainable Tourism*, 26(3), 362–378. <https://doi.org/10.1080/09669582.2017.1354865>
- Leal, M. M., Casais, B., & Proença, J. F. (2022). Tourism co-creation in place branding: The role of local community. *Tourism Review*, 77(5), 1322–1332. <https://doi.org/10.1108/TR-12-2021-0542>
- Marôco, J. (2021). *Análise de equações estruturais: Fundamentos teóricos, software & aplicações* (3.ª ed.). ReportNumber.
- Marôco, J., & Garcia-Marques, T. (2006). Qual a fiabilidade do alfa de Cronbach? Questões antigas e soluções modernas? *Laboratório de Psicologia*, 4(1), 65–90. <https://shre.ink/7yyk>
- Matos, D. A. S., & Rodrigues, E. C. (2019). *Análise fatorial*. Enap.
- Medeiros, T., Moniz, A. I., Mendes, J., Silva, O., Tomás, L., Sousa, M., Furtado, S., Vieira, V., Ferreira, J. A., & Santos, C. (2021). Oportunidades e desafios do turismo sénior nos Açores. In T. Medeiros (Ed.), *Turismo Sénior no destino Açores* (pp. 68–95). Projeto de investigação TU-Sénior55+.
- Moon, H., & Han, H. (2018). Destination attributes influencing Chinese travelers' perceptions of experience quality and intentions for island tourism: A case of Jeju Island. *Tourism Management Perspectives*, 28, 71–82. <https://doi.org/10.1016/j.tmp.2018.08.002>
- Oliveira, C., Brochado, A., Moro, S., & Rita, P. (2019). Consumer perception of tourist experience through online reviews: The islands of the senses of Cape Verde. *Worldwide Hospitality and Tourism Themes*, 11(6), 696–717. <https://doi.org/10.1108/WHATT-09-2019-0052>
- Parra-López, E., & Martínez-González, J. A. (2018). Tourism research on island destinations: A review. *Tourism Review*, 73(2), 133–155. <https://doi.org/10.1108/TR-03-2017-0039>
- Rontos, K., Kitrinou, E., Lagos, D., & Diakomihalis, M. (2012). Islands and tourism development: A viewpoint of tourism stakeholders of Lesbos island. In M. Kasimoglu (Ed.), *Visions for Global Tourism Industry—Creating and Sustaining Competitive Strategies*. InTech. <https://doi.org/10.5772/37110>
- Sayre, R., Dangermond, J., Wright, D., Breyer, S., Butler, K., Graafeiland, K. B., Frye, C., Karagulle, D., Koop, S., Noble, S., Cress, J., Burton, D., Martin, M., & Steiner, J. (2019). *A new map of global islands*. American Association of Geographers.
- Sharpley, R. (2012). Island tourism or tourism on islands? *Tourism Recreation Research*, 37(2), 167–172. <https://doi.org/10.1080/02508281.2012.11081701>
- Silva, O., Medeiros, T., Moniz, A. I., Tomás, L., Mendes, J., & Vieira, V. (2021). Senior tourism activities and interests in the Azores as a destination. In J. V. de Carvalho, Á. Rocha, P. Liberato, & A. Peña (Eds.), *Advances in tourism, technology and systems* (Vol. 208, pp. 309–319). Springer. [https://doi.org/10.1007/978-981-33-4256-9\\_28](https://doi.org/10.1007/978-981-33-4256-9_28)
- Silva, O., Medeiros, T., Tomás, L., Vieira, V., Furtado, S., Santos, C., & Ferreira, J. (2018). Escala de motivações dos turistas seniores. *25th APDR Congress*, 372–379. <https://shre.ink/7yym>
- Silva, O., Medeiros, T., Vieira, V., & Furtado, S. (2021). Motivations of senior tourists: The case of the Azores Islands, Portugal. *Anatolia*, 32(4), 617–627. <https://doi.org/10.1080/13032917.2021.1999758>
- Simões, A. (1992). Ulterior validação de uma escala de satisfação com a vida (SWLS). *Revista Portuguesa de Pedagogia*, 26(3), 503–515. <https://shre.ink/7yFY>
- Tung, V. W. S., Lin, P., Qiu Zhang, H., & Zhao, A. (2017). A framework of memory management and tourism experiences. *Journal of Travel & Tourism Marketing*, 34(7), 853–866. <https://doi.org/10.1080/10548408.2016.1260521>
- Wei, C., Zhao, W., Zhang, C., & Huang, K. (2019). Psychological factors affecting memorable tourism experiences. *Asia Pacific Journal of Tourism Research*, 24(7), 619–632. <https://doi.org/10.1080/10941665.2019.1611611>