



Replicating consumer value scales: A comparative study of EVS and PERVAL at a cultural heritage site

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ABSTRACT

PERVAL (PERceived VALue) scale has been frequently replicated and adapted in tourism to measure consumer value; however, EVS (Experiential Value Scale) better reflects the experiential nature of tourism consumption. Focusing on a famous cultural heritage site in France (Chambord castle), this research compares PERVAL and EVS by replicating them as concisely as possible. The results of a quantitative survey of 402 visitors show the similarities and dissimilarities between these two scales regarding their psychometric properties, predictive ability, practicality, and actionability. In contrast to a literature review (favoring PERVAL scale for tourism), this research underlines the complementary nature of these two scales and advises researchers to choose a scale in keeping with their focus, because while PERVAL offers a broader view of consumer value, EVS offers a close-up of the experiential aspects.

1. Introduction

Value measurement has always been controversial (Gallarza, Arteaga, Del Chiappa, Gil-Saura, & Hobrook, 2017), particularly regarding consumer value scales as a multifaceted construct (Walsh, Shiu, & Hassan, 2014). Researchers offer several multidimensional value scales, particularly for shopping value (e.g. Babin, Darden, & Griffin, 1994; Mathwick, Malhotra, & Rigdon, 2001; Sweeney & Soutar, 2001), and those scales have been extended into the tourism sector as well (e.g. Petrick, 2002; Sánchez, Callarisa, Rodríguez, & Moliner, 2006). Indeed, the varying consumer experience contexts led authors to develop a myriad of scales, many of which share little content with the originals.

This article focuses on two scales developed for retailing, but which widely influence value measurement in tourism: PERVAL (PERceived VALue; Sweeney & Soutar, 2001) and EVS (Experiential Value Scale; Mathwick et al., 2001). We question these scales' use in tourism. Specifically, we discuss whether, almost 20 years after their development, these original scales are still relevant and universal. Moreover, while the tourism sector has been proven to have important experiential aspects (Spielmann, Babin, & Manthiou, 2018), it's surprising that PERVAL scale, which is more product-oriented and less experiential than EVS, has had a greater impact on tourism literature. This article therefore

adopts a replication with extension approach (Hubbard & Armstrong, 1994), comparing the two scales by only slightly adapting them to a new tourism setting – a cultural heritage site.

Theoretically, as a concept and as a measure, value is important in the tourism sector because: the richness of the tourism experience rationally and emotionally (Lee, Lee, & Choi, 2011), the search for variety and novelty, and its relatively infrequent consumption (Arnould & Price, 1993). Tourism managers facing intensified competition find that value creation is a key driver of customer loyalty and differentiation (Sirakaya-Turk, Ekinci, & Martin, 2015). Accordingly, EVS and PERVAL scales allow researchers to explore the multidimensional nature of a cultural heritage experience's value, while methodologically investigating these scales' actionability and predictive ability (Leroi-Werelds, Streukens, Brady, & Swinnen, 2014).

This paper makes two main contributions to the current literature. The first contribution is that we propose a new replication of PERVAL and EVS scales by only adapting them slightly. We assess their applicability, transferability, and universality regarding a new tourism setting (a cultural heritage experience) and geographical area (a non-English-speaking country) and do not focus on replicating studies, but scales. The second contribution is that we propose a comparison: but unlike Leroi-Werelds et al. (2014) value measures' comparison, we examine two of the most famous multidimensional scales, and use an

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Table 1
Comparing PERVAL and EVS.

		Criteria	EVS	PERVAL
CONCEPT	THEORETICAL SUPPORT, SETTING & IMPACT	Conceptual origin	Holbrook 's value taxonomy (1999)	Sheth et al.'s value taxonomy (1991)
		Conceptual approach according to Gallarza, Arteaga, Del Chiappa, Gil-Saura, and Holbrook (2017) classification	8 dimensions Experiential	5 dimensions Mixed Approach (experiential + Trade-off)
		Date and Journal	2001 Journal of Retailing	2001 Journal of Retailing
		Service setting chosen and samples	Retailing. Compares catalog shoppers and Internet shoppers	Retailing. Consumer durable goods
		Number of citations (Google scholar, retrieved June 6, 2019)	2261 (2001 paper) and 621 (2002 paper)	5040
		Consideration of negative value inputs Consideration of social dimension	Yes (Customer ROI) No	Yes (Price, value for money) Yes
MEASUREMENT	INTRA-VARIABLE	Number of items	19	19
		First/Second order	Combines first- (<i>Excellence</i>) and second-order measures	Tries second-order for functional value, but prefers first-order
		Formative/Reflective Reversed items	Reflective (implicitly stated) Yes (just one "prices are too high for the quality")	Reflective (explicitly stated) Yes (just one: "would not last a long time")
	INTER-VARIABLE	Number of outcome variables	2	3
		Name of outcome variables	Retail preference; Patronage Intention	Willingness to buy, willingness to recommend, not expecting problems

intra-subject approach as advised by Holbrook (1999).

A critical literature review of previous PERVAL and EVS uses follows the introduction. Thereafter, a quantitative study is presented in which 402 visitors to Chambord castle in France (a UNESCO World Heritage Site) answer a questionnaire containing PERVAL and EVS scales. The findings allow us to compare the two scales in terms of the following four criteria: psychometric properties, predictive ability, practicality, and actionability (Leroi-Werelds et al., 2014). Finally, the conclusion provides details of the main contributions and research avenues.

2. Theoretical background

2.1. Value scales: Comparing PERVAL and EVS

PERVAL, developed by Sweeney and Soutar (2001), became one of the most popular value scales, particularly in retailing and tourism. It comprises 19 items addressing four dimensions: Quality Value, Price Value, Emotional Value, and Social Value.

Contemporaneously, Mathwick et al. (2001, 2002) proposed the first scale that explicitly considered "experiential value," comprising 19 items and seven first-order dimensions, some of which were aggregated into second order dimensions: Visual Appeal and Entertainment (aggregated into Aesthetics), Escapism and Enjoyment (into Playfulness), Efficiency and Economic Value (into Customer Return on Investment), and Excellence.

Table 1 compares conceptualization, the "intra-variable" measurement (value dimensions), and the "inter-variable" measurement (the relationships between value and other variables) (Gallarza & Gil-Saura, 2006).

Originally, both scales were conceived for the same sector (retailing), but EVS is more service-oriented (catalog and online shopping), while PERVAL is product-oriented and assesses "the value of a consumer durable good at a brand level" (Sweeney & Soutar, 2001, p. 203). However, paradoxically, PERVAL is more frequently applied to tourism (Walsh et al., 2014) and EVS has never been replicated in a cultural heritage context.

2.2. Replications of PERVAL and EVS scales

Fig. 1 critically reviews 25 works as replications of PERVAL (upper part) and EVS (lower part). Based on Tsang and Kwan (1999) typology of

replications – i.e. whether the same measurement (empirical generalization) or not (generalization and extension) – a continuum is proposed in which the dichotomy has been enriched by integrating (central part) the degree of change regarding the items and/or dimensions, ranging from "strict" to "extended adaptation."

From left to right, there are works that replicate the entire PERVAL and with the same data (Walsh et al., 2014); other studies change the settings and adapt the items, but maintain the dimensions (e.g. Fu, Zhang, Lehto, & Miao, 2017), or add new ones (e.g. Williams & Soutar, 2009; Eid & El-Gohary, 2015), or remove one dimension and add others (e.g. Petrick, 2002, 2004). Regarding the less replicated EVS, certain authors reduce the number of dimensions and items for similar retailing contexts (e.g. Keng, Huang, Zheng, & Hsu, 2007; Mencarelli & Lombart, 2017), while, in hospitality contexts, they maintain the dimensions, but reduce the number of items (e.g. Wu & Liang, 2009; Chen, Yeh, & Huan, 2014).

Our review has also found works using dimensions from both EVS and PERVAL (central part of Fig. 1) to create new scales: see the POCVAL (Perceived Online Channel Value) scale by Carlson, O’Cass, and Ahrholdt (2015), or Chen and Hu (2010, p.340), who "adapted from Petrick (2002) and Sweeney and Soutar (2001) except for an aesthetics element of symbolic value adapted from Mathwick, Malhotra, and Rigdon (2002)".

The right side of the continuum presents studies which use some indicators from EVS and/or PERVAL. This "self-service" approach is very common, but may damage scales' content validity. In this free approach, other works create and validate new scales, for example, in Varshneya and Das (2017, p. 50), the original literature is not explicitly mentioned ("black box"), but the (adapted) text corresponds to EVS. Rasoolimanesh, Dahalan, and Jaafar (2016, p. 74) test a three-dimensional scale which resembles the PERVAL structure, but uses a combination of sources from other authors. All these replications create a kaleidoscopic view for researchers; that is, a view that is extremely diverse and colorful due to the value contextuality, but one that also changes continuously, which doesn't favor theory building regarding value.

Accordingly, in terms of Fig. 1, and contrary to most research in tourism/hospitality settings that use "extended" (distorting) adaptations of PERVAL and EVS scales by changing many items and/or dimensions, this paper opts for a strict adaptation of the original scales (far left). That is, we use the same number of items and number of dimensions, and do only minimum changes to the wordings.

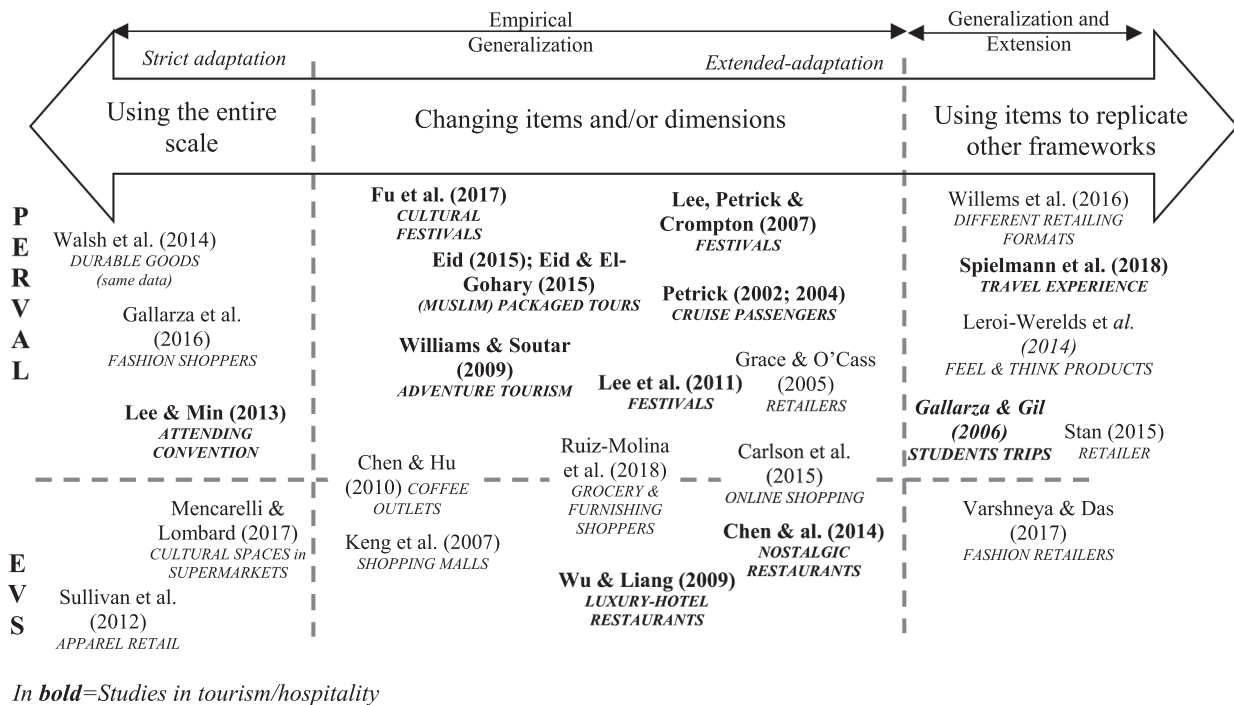


Fig. 1. A critical review of replication of EVS and PERVAL scales. (See above-mentioned references for further information.)

Table 2
Model fit indices of PERVAL.

	CMIN (df)	CMIN/DF	GFI	AGFI	NFI	TLI	CFI	RMSEA (min; max)
Model 2nd order	453.116 (1 4 7)	3.082	0.892	0.860	0.912	0.929	0.939	0.072 (0.065;0.080)
Model 1st order	452.972 (1 4 6)	3.103	0.892	0.859	0.912	0.928	0.939	0.072 (0.065;0.080)
Model 1st order*	363.440 (1 1 3)	3.216	0.901	0.865	0.926	0.937	0.948	0.074 (0.066;0.083)

* Model without the two deleted items: “The visit to Chambord castle ...has poor workmanship” and “...has not lasted a long time”.

Table 3
PERVAL confirmatory factor analysis results.

Item/Factor	Factor loadings				Item Reliability
	Quality value	Emotional value	Price value	Social value	
QualVal1	0.768				0.590
QualVal2	0.625				0.391
QualVal3	0.745				0.555
QualVal4	0.637				0.406
EmoVal1		0.868			0.753
EmoVal2		0.795			0.632
EmoVal3		0.643			0.413
EmoVal4		0.734			0.539
EmoVal5		0.872			0.760
PriVal1			0.922		0.850
PriVal2			0.953		0.908
PriVal3			0.914		0.835
PriVal4			0.740		0.548
SocVal1				0.914	0.835
SocVal2				0.781	0.610
SocVal3				0.900	0.810
SocVal4				0.886	0.785
CR	0.789	0.889	0.935	0.927	
AVE	0.485	0.620	0.785	0.760	
Φ matrix squared					
Emotional Value	0.387				
Price Value	0.139	0.227			
Social Value	0.038	0.031	0.027		

CR = Composite Reliability; AVE = Average Variance Extracted.

3. Empirical research

3.1. Questionnaire and sampling

A questionnaire was created (in English and French) containing, in first part, PERVAL and EVS – see Appendix A; the order of presentation has been subject to variations and controls (comparisons $p_{mean} = 0.441$) – Each scale’s wording was adapted to reflect a visit to the castle, and approved by a pool of 11 experts. The French version was subject to a rigorous back-translation process and checked by four French researchers.

The second part of the questionnaire integrates the same constructs used by Leroi-Werelds et al. (2014) to verify the scales’ predictive ability: Satisfaction (adapted from Oliver, 1980), Loyalty Intentions (Revisit Intention), and Word-of-Mouth (WOM) Intention (both adapted from Zeithaml, Berry, & Parasuraman, 1996). All scales follow a seven-point response scale, ranging from 1 (strongly disagree) to 7 (strongly agree). The psychometric properties of all three dependent variables are satisfactory (see Appendix B).

The survey was conducted from July 2 to 12, 2018, using trained interviewers who questioned visitors at the end of their visit. The respondents (N = 402) were from France (71.1%), male (50.2%), and visiting the castle for the first (62.4%) or second (23.9%) time, and travelling mainly in couples (51.7%), with family (32.8%), or with friends (9.2%), thus constituting a representative sample of visitors to this castle.¹

¹ https://cdn1.chambord.org/fr/wp-content/uploads/sites/2/2018/10/CHAMBORD_RA2017_Web.pdf.

Table 4
Model fit indices of EVS.

	CMIN (df)	CMIN/DF	GFI	AGFI	NFI	TLI	CFI	RMSEA (min; max)
Model 1st order factor	242.886 (1 3 1)	1.854	0.941	0.914	0.943	0.964	0.973	0.046 (0.037;0.055)
Model 2nd order factor	286.881 (1 4 0)	2.049	0.932	0.907	0.933	0.956	0.964	0.051 (0.043;0.060)

Table 5
EVS with first-order factors – confirmatory factor analysis results.

Item/Factor	Factor loadings							Item Reliability
	Visual Appeal	Entertainment	Escapism	Enjoyment	Efficiency	Economic Value	Excellence	
VisApp1	0.811							0.658
VisApp2	0.876							0.767
VisApp3	0.609							0.371
Entert1		0.833						0.694
Entert2		0.804						0.646
Entert3		0.901						0.812
Escap1			0.807					0.651
Escap2			0.730					0.533
Escap3			0.801					0.642
Enjoy1				0.762				0.581
Enjoy2				0.850				0.723
Effic1					0.546			0.298
Effic2					0.903			0.815
Effic3					0.812			0.659
Eco1						0.916		0.839
Eco2						0.939		0.882
Eco3						0.636		0.404
Exc1							0.627	0.393
Exc2							0.704	0.496
CR	0.814	0.884	0.823	0.789	0.806	0.876	0.615	
AVE	0.599	0.717	0.609	0.652	0.591	0.708	0.444	
Φ matrix squared								
Entertainment	0.348							
Escapism	0.177	0.468						
Enjoyment	0.240	0.417	0.428					
Efficiency	0.135	0.448	0.423	0.616				
Economic Val.	0.072	0.137	0.148	0.150	0.088			
Excellence	0.182	0.233	0.576	0.329	0.289	0.165		

CR = Composite Reliability; AVE = Average Variance Extracted.

Table 6
Convergent and discriminant validity.

	VA	Ent	Esc	Enj	Eff	EcoV	Exc	QV	EmoV	PV	SV	Sat	RI	WOM
VA	0.599													
Ent	0.348	0.718												
Esc	0.177	0.466	0.610											
Enj	0.243	0.423	0.432	0.650										
Eff	0.135	0.448	0.421	0.619	0.591									
EcoV	0.074	0.129	0.141	0.142	0.084	0.709								
Exc	0.183	0.231	0.575	0.333	0.333	0.288	0.445							
QV	0.176	0.318	0.142	0.151	0.125	0.049	0.223	0.485						
EmoV	0.286	0.297	0.289	0.315	0.267	0.099	0.366	0.388	0.620					
PV	0.104	0.135	0.130	0.156	0.081	0.624	0.179	0.135	0.225	0.788				
SV	0.012	0.035	0.086	0.024	0.076	0.024	0.038	0.038	0.032	0.026	0.760			
Sat	0.280	0.356	0.296	0.420	0.259	0.140	0.419	0.246	0.476	0.228	0.031	0.751		
RI	0.043	0.227	0.270	0.229	0.186	0.082	0.200	0.156	0.193	0.110	0.062	0.261	0.517	
WOM	0.218	0.317	0.285	0.328	0.233	0.099	0.394	0.208	0.433	0.154	0.025	0.656	0.367	0.798

* AVE diagonally; squared correlations.

VA = Visual Appeal; Ent = Entertainment; Esc = Escapism; Enj = Enjoyment; Eff = Efficiency; EcoV = Economic Value; Exc = Excellence; QV = Quality Value; EmoV = Emotional Value; PV = Price Value; SV = Social Value; Sat = Satisfaction; RI = Revisit Intension; WOM = WOM Intention.

As in the original studies, the data were analyzed using structural equation modeling SEM (maximum likelihood estimation; reflective constructs) from the software AMOS following a two-step procedure (Anderson & Gerbing, 1988).

3.2. Measurement models: Comparison of psychometric properties

Aiming at eliminating as few items as possible in order to preserve the scale’s reproducibility, only two items were deleted from PERVAL (λ

< 0.5): QualVal5 and QualVal6). The 17 items scale showed a good fit (Table 2).

Like Sweeney and Soutar (2001), we retained a first-order model. With or without the two items, the model fit indices are satisfactory, although slightly weaker than in the original study (2001; p.210). The factor structure is also satisfactory (Table 3) and the composite reliability verified (CR > 0.7). Despite an AVE slightly below the 0.5 criteria in respect of one dimension (0.485), convergent and discriminant validity are also satisfactory (Table 6).

Two items of EVS were problematic: VisApp3 and Effic1, which have the lowest factorial contributions (respectively $\lambda = 0.609$ and 0.546). This is consistent with “Fits my schedule” in Mathwick et al. (2001, p.49), which also has low scores (0.62 for catalog shoppers and 0.52 for online shoppers). These scores are nevertheless acceptable in terms of the expected literature standards, and under-identification problems would occur if these two items were deleted from EVS (Hair, Babin, & Krey, 2017).

Despite this weakness, the fit indexes of EVS are satisfactory (Table 4) and higher than in Mathwick et al. (2001; p. 47–48), but the Excellence dimension (Table 5) has a low internal consistency (CR = 0.615; AVE = 0.444), and poor discriminant validity (Table 6): a problem that Mathwick et al. already faced (2001, p.47).

Mathwick et al. (2001) also indicate that the “discriminant validity is difficult to establish when working with multidimensional, hierarchically organized constructs” (p.48). However, the measurement model is also satisfactory in terms of the structure with second-order factors (Appendix C); this model was selected to replicate the original factorial structure. In short, the EVS scale seems just as suitable as PERVAL (Table 5).

As a final step, the convergent and discriminant validity (Table 6) of both scales were evaluated further (Hair et al., 2017). There are high correlations ($r > 0.5$) between Emotional Value (PERVAL) and, logically, the EVS intrinsic dimensions (Visual Appeal, Entertainment, Escapism, and Enjoyment). Since the complementarity of the two scales emerged, it seemed useful to delve deeper into PERVAL emotional component (evaluated by EVS). In other words, EVS is more granular than PERVAL, and PERVAL captures value’s large dimensions.

3.3. Structural models: Comparison of predictive ability

PERVAL fit indices for the structural model (Fig. 2) are: $\chi^2_{(1017.27)}/df_{(285)} = 3.569$; CFI = 0.905; RMSEA = 0.080. Moreover, the Adjusted Theoretical Fit Index (ATFI), developed by Hair et al. (2017) to assess the evolution from the measurement to the structural model, is also

satisfactory (ATFI_{PERVAL} = 0.0371). EVS model fit indices for the structural model (Fig. 3) are: $\chi^2_{(1413.78)}/df_{(333)} = 4.246$; CFI = 0.846; RMSEA = 0.090; ATFI_{EVS} = 0.0972.

By comparing the results of these two structural models, four main comments can be formulated:

(a) The squared multiple correlations (SMCs; R^2) show that PERVAL and EVS explain both Satisfaction (>0.400) and WOM Intention (>0.640). However, EVS (0.557) predicts the Revisit Intention better than PERVAL (0.224). By replicating PERVAL with an adaptation that is strict compared with others, the value dimensions’ predictive ability is less important than when using extended adaptations (50% or more in Petrick, 2004; Lee, Petrick, & Crompton, 2007; Williams & Soutar, 2009; Eid & El-Gohary, 2015).

(b) In contrast to WOM Intention, only PERVAL ($p < 0.01$) verifies Satisfaction’s mediating role between the value dimensions and the Revisit Intention, since EVS ($p = 0.96$) does not.

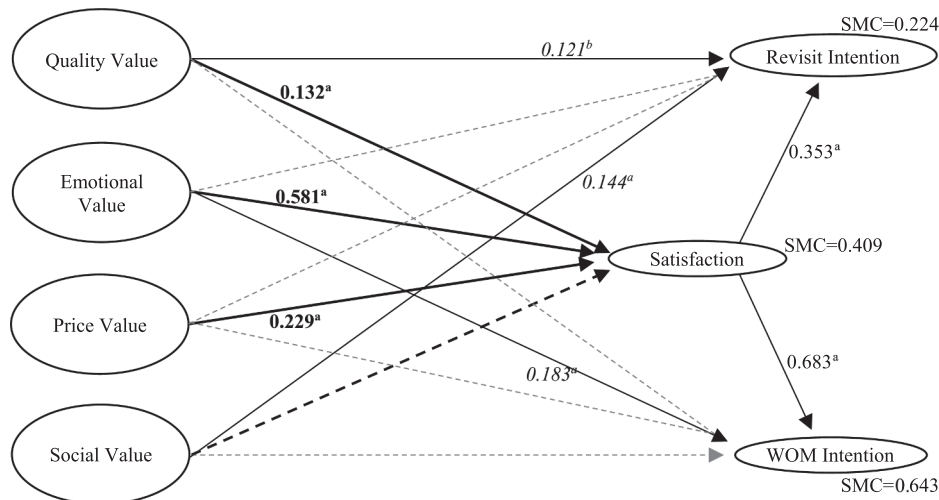
(c) The EVS’s ability to predict the Revisit Intention is related to the direct effects of the value dimensions, which are more important than those of PERVAL.

(d) All of EVS dimensions influence Satisfaction ($0.281 < \gamma < 0.394$; $p < 0.05$). However, Social Value in PERVAL does not influence Satisfaction ($p = 0.326$), and the effect of Emotional Value on Satisfaction is particularly important ($\gamma = 0.581$; $p < 0.01$).

To summarize, EVS and PERVAL are supposed to evaluate the same phenomenon, but they do so differently, because while both allow Satisfaction and WOM predictions, they do not provoke a Revisit Intention in the same way. Nevertheless, both seem suitable for assessing consumer value in the studied context.

3.4. Practicality

The duration of the two scales’ administration could not be evaluated, as the questionnaire included both scales (intra-personal comparisons as advised by Holbrook, 1999). The respondents scarcely mentioned the intra-measure and inter-measure items’ redundancy, and



Fit indices: $\chi^2=1017.273 / df=285$ (3.569); CFI=0.905; GFI=0.836; NFI=0.873; NNFI=0.891; RMSEA=0.080 [0.075; 0.085]. Significant indirect effects: Quality Value→Revisit Intention (0.047^b); Emotional Value→Revisit Intention (0.205^a); Price Value→Revisit Intention (0.081^a); Quality Value→WOM Intention (0.090^b); Emotional Value→WOM Intention (0.397^a); Price Value→WOM Intention (0.157^a). ^a $p < 0.010$; ^b $p < 0.050$; ^c $p < 0.100$. Solid line: significant path. Dotted line: non-significant path.

Fig. 2. Standardized parameter estimates–PERVAL.

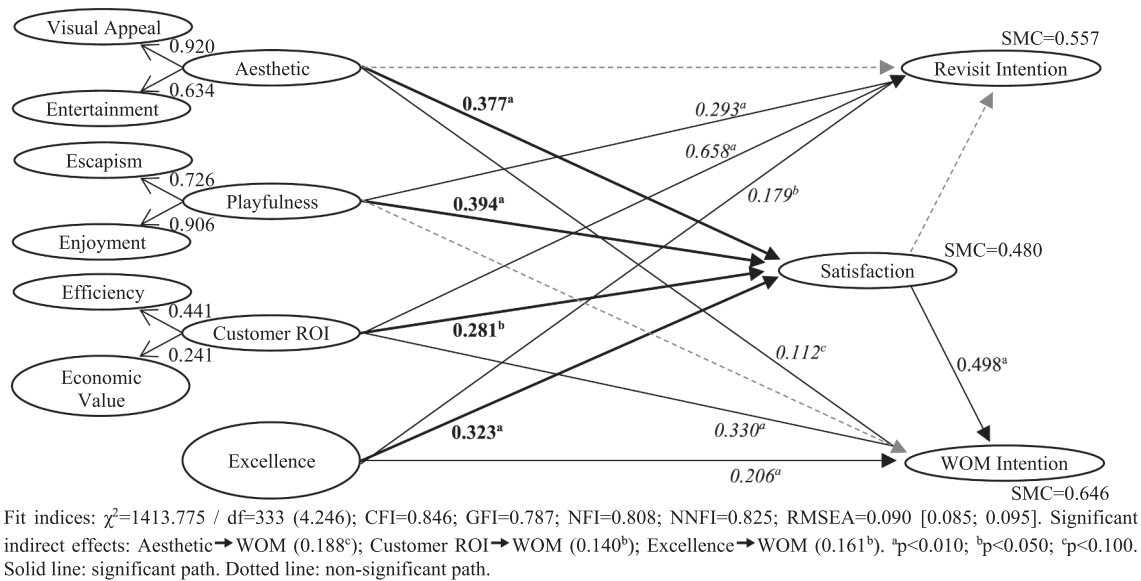


Fig. 3. Standardized parameter estimates–EVS.

there were just 6% incomplete questionnaires (due to its length). Special care was taken to address potential bias related to the common method variance (CMV): (a) *Ex ante*, during the research design (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), because the sample was diverse and the data collected over eight different days, the respondents’ anonymity was guaranteed, and the questionnaire layout was simple; (b) *Ex post* statistical analyses were made following Harman’s single-factor test, but no CMV problem was detected (33.2% of the variance; eigenvalue = 15.271; AVE = 30.6%; both these results are under the critical threshold of 50%).

3.5. Actionability

Based on their predictive ability, the results of both measures’ actionability seem paradoxical. When adopting an experiential approach (and EVS, a finer-grained structure), the most cognitive component (Customer ROI) seems most important. However, when adopting a more cognitive (and more global) measure (PERVAL), the Emotional Value is the most experiential component and seems to be a key driver of future behaviors and attitudes. From a managerial viewpoint, the best solution would be to systematically favor the use of at least two measures (different and complementary) to evaluate such a complex concept. PERVAL provides a broad spectrum of value dimensions and can be initially used to identify the main source of value creation. In a second phase, EVS will allow researchers to zoom in on the more experiential facets and to refine the managerial recommendations.

4. Conclusion

4.1. Main contributions and recommendations

First, by only slightly adapting PERVAL and EVS scales, this research corroborates both scales’ reliability and validity, and also suggests their suitability for measuring consumer value in extended contexts (cultural heritage experiences) and geographical areas (non-English-speaking countries). This research’s results contradict those of previous research on tourism contexts, which distort PERVAL over time (dimensions added/deleted, modification of items).

Second, this research completes Leroi-Werelds et al. (2014) comparison of value measures by examining two value scales (PERVAL and EVS) by means of the same criteria: psychometric properties, predictive ability, practicality, and actionability. In keeping with Hair et al. (2017)

recommendations to strengthen the methodological rigor of comparisons, we adopted an intra-subject approach to assess value (Holbrook, 1999).

Third, our results underline that the choice of measurement is not trivial, since the conclusions could differ (as effects on Satisfaction do) depending on the selected scale. The choice of a scale and/or its potential adaptation or modification could explain why replicated studies’ results often conflict with the original ones (Hubbard & Armstrong, 1994; Babin, Griffin, & Hair, 2016).

In this sense, our review also questions why PERVAL has been more frequently replicated and adapted in tourism than EVS, which seems more due to inertia than deliberate reasoning. Indeed, PERVAL and EVS scales are meant to evaluate the same phenomenon, but they do so in different ways. Beyond the inertia logic of value scales replication in tourism, and with reference to Rossiter’s works (2002), the choice of a measurement should not solely depend on the studied context (research object). It should also take the understanding the phenomenon (research attribute) into account. The choice is between PERVAL’s broader view of value (a more holistic view of consumer experience) and EVS’s more detailed view of value for (a more granular view of consumer experience). The results of value’s predictive ability depend on the approach adopted – the two approaches’ results will not be the same, but could be integrated. Our recommendation is summarized better in a schematic form (Fig. 4).

Consistent with our results, we recommend using the existing scales as initially proposed in the literature, adapting them as little as possible, and using them in a complementary way, rather than retaining only one, heavily modified scale. This will allow researchers to compare their results with previous studies without distorting the original measure. In this sense, our work highlights the challenge of original measures’ adaptation: Do we measure what we need to measure, or do we measure what we want to measure?

4.2. Limitations and future orientations

This study’s main limitations relate to our choices. The scope of comparison is restricted to a specific tourist context and two value scales. We also acknowledge subjectivity when judging the degree of adaptation found elsewhere in our review and reflected in Fig. 1. Choosing other contexts for comparison and adding other scales (e.g. Babin et al., 1994) could provide additional knowledge. Moreover, methodologically, adaptation to a cultural heritage experience and the

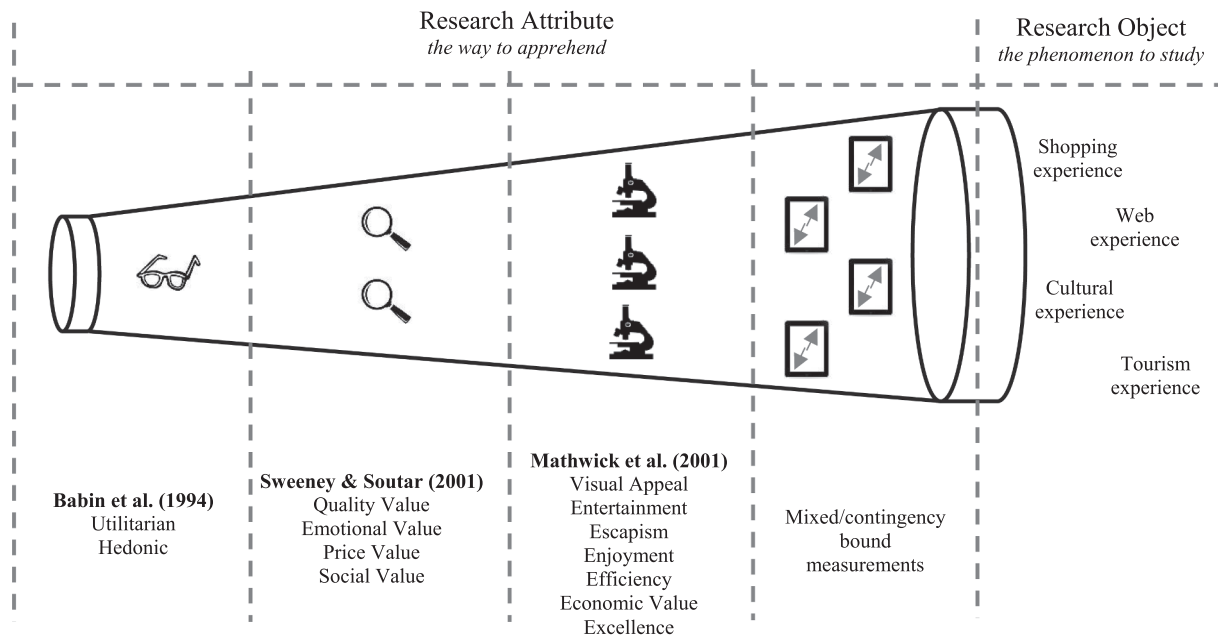


Fig. 4. The choice of the right lens for value measurement.

precautions taken not to distort the original scales have resulted in (at times too little) fit and acceptable indices, as also reflected in other replications (e.g. Walsh et al., 2014). In addition, further studies could use comparatively adapted and original scales, as well as test measurements and structural models. From a measurement viewpoint, the evolution of fit indices should be interesting, allowing researchers to discover whether significant relationships remain.

To summarize, the process of choosing a scale is never easy. Our

proposal of a zoom in/zoom out approach at the end of this research may constitute a starting point for future studies.

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Appendix A

Description of PERVAL and EVS Measures [and coding].

EVS Measure	
Visual Appeal	
The castle is attractive	[VisApp1]
The castle is aesthetically appealing	[VisApp2]
I like the way the castle looks	[VisApp3]
Entertainment	
I think the visit to the castle was very entertaining	[Entert1]
The enthusiasm of the visit to the castle was catching me, picked me up	[Entert2]
The visit to the castle has entertained me	[Entert3]
Escapism	
The visit of the castle made me feels if I was in another world	[Escap1]
The visit of the castle “got me away from it all”	[Escap2]
I got so involved during the visit to the castle that I forgot everything else	[Escap3]
Enjoyment	
I enjoyed the visit to the castle for its own sake, not just to spend time	[Enjoy1]
I visited the castle for the pure enjoyment of it	[Enjoy2]
Efficiency	
Visiting the castle fit with my schedule	[Effic1]
Visiting the castle was an easy to manage my time	[Effic2]
Visiting the castle has been an easy way to entertain me	[Effic3]
Economic Value	
The visit to the castle had a good economic value	[Eco1]
Overall, I am happy with the prices charged by the castle	[Eco2]
The castle’s prices are too high given the quality of the visit	[Eco3]

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EVS Measure	
Excellence	
When I think of Chambord castle, I think of excellence	[Exc1]
I think of Chambord castle as an expert in castles	[Exc2]
PERVAL Measure	
Quality Value	
The visit to Chambord castle...	
...is well made, well organized	[QualVal1]
...has consistent quality	[QualVal2]
...has an acceptable standard of quality	[QualVal3]
...performed consistently	[QualVal4]
...has poor workmanship	[QualVal5]
...has not lasted a long time	[QualVal6]
Emotional Value	
This castle is one that I enjoyed	[EmoVal1]
This castle made me want to visit it	[EmoVal2]
This castle is one that I felt relaxed about visiting	[EmoVal3]
The visit to his castle made me feel good	[EmoVal4]
The visit to this castle gave me pleasure	[EmoVal5]
Price Value	
The visit to Chambord castle...	
...is reasonably priced	[PriVal1]
...offers value for money	[PriVal2]
...is a good destination for the price	[PriVal3]
...is economical	[PriVal4]
Social Value	
I think the visit to Chambord castle will...	
...give its visitor social approval	[SocVal1]
...help me feel acceptable	[SocVal2]
...improve the way I am perceived by others	[SocVal3]
...make a good impression on other people	[SocVal4]

Appendix B

Confirmatory Factor Analysis of dependent variables.

Construct/Item	Stand. Estimate (t)
<i>Satisfaction</i>	CR = 0.900; AVE = 0.751
I think that I did the right thing when I decided to visit the castle	0.869 (*)
I am satisfied with my decision to visit Chambord castle	0.820 (20.687)
Visiting the castle was a good choice	0.909 (24.259)
<i>Revisit Intention (loyalty)</i>	CR = 0.762; AVE = 0.518
Visit Chambord castle again when you would want to visit a castle	0.810 (*)
Doubt about visiting this castle again(R)	0.669 (11.557)
Consider Chambord as your first choice for visiting a castle	0.671 (11.583)
<i>WOM Intention</i>	CR = 0.922; AVE = 0.798
Recommend visiting Chambord to someone seeking your advice	0.911 (*)
Say positive things about Chambord castle to other people	0.869 (25.498)
Encourage friends and relatives to visit Chambord castle	0.900 (27.445)

Appendix C

EVS –with Second-Order Factors– Confirmatory Factor Analysis Results.

Item/Factor	Factor loadings							Item reliability
	Visual Appeal	Entertainment	Escapism	Enjoyment	Efficiency	Economic Value	Excellence	
1st order								
VisApp1	0.811							0.658
VisApp2	0.877							0.769
VisApp3	0.606							0.367
Entert1		0.832						0.692
Entert2		0.804						0.646
Entert3		0.903						0.815
Escap1			0.807					0.651
Escap2			0.739					0.546
Escap3			0.795					0.632

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Item/Factor	Factor loadings							Item reliability
	Visual Appeal	Entertainment	Escapism	Enjoyment	Efficiency	Economic Value	Excellence	
Enjoy1				0.774				0.599
Enjoy2				0.837				0.701
Effic1					0.550			0.303
Effic2					0.902			0.813
Effic3					0.811			0.658
Eco1						0.916		0.839
Eco2						0.939		0.882
Eco3						0.636		0.405
Exc1							0.665	0.442
Exc2							0.663	0.440
CR	0.814	0.884	0.824	0.787	0.807	0.876	0.612	
AVE	0.598	0.718	0.610	0.650	0.591	0.708	0.441	
2nd order								
Aesthetic	0.616	0.957						
Playfulness			0.804	0.818				
Customer ROI					0.730	0.406		

CR = Construct Reliability; AVE = Average Variance Extracted.

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