

Bridging Conceptual and Empirical Knowledge in Research on Customer Value: A Comprehensive Service-Value Index

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**A multidimensional service-value scale based on Holbrook's
typology of customer value: bridging the gap between the
concept and its measurement**

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3 **A multidimensional service-value scale based on Holbrook's typology of customer**
4 **value: bridging the gap between the concept and its measurement**
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7 **Purpose** – In the fertile line of research on consumer value from the services literature,
8 a gap exists between theoretical and empirical knowledge, in particular regarding
9 Holbrook's conceptual value framework. The present work seeks to find construct
10 validity for a multidimensional value scale based on his proposal.
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12 **Design / Methodology / Approach** – Based on a literature review, a qualitative phase,
13 and consultation with an expert, eight value scales (efficiency, service quality, play,
14 aesthetics, status, esteem, ethics, and escapism as an adaptation of spirituality) are tested
15 on a sample of 585 hotel customers and are further analyzed with simple and partial
16 correlations, multiple regressions, and structural modelling.
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19 **Findings** – Following the literature on the merits of Holbrook's value typology, results
20 are presented in three concatenated phases: (1) validation of Holbrook's eight value
21 scales corresponding to his eight value types; (2) interrelationships between these value
22 types showing a predominance of the extrinsic-intrinsic and self-other dimensions; and
23 (3) construction of six indices based on the $2 \times 2 \times 2$ matrix (self, other, extrinsic,
24 intrinsic, active, and reactive) and a value index as a higher-order representation. The
25 results support Holbrook's typology, thereby supporting construct validity for the
26 multidimensional scales.
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29 **Research Limitations / Implications** – Implications for further conceptual research on
30 value are presented. Meanwhile, the empirical study is context-specific, related to a
31 hospitality experience.
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33 **Originality / Value** – Although Holbrook's typology has gained widespread attention,
34 to the best of the authors' knowledge, no previous research has tested all eight value
35 types simultaneously in the same empirical work.
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38 **Keywords** – service value, value dimensions, hospitality, higher-order measures,
39 construct validity.
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41 **Article Classification:** Research paper
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1. Introduction

Understanding the process of creating and attributing value has interested scholars since the start of academic marketing research (Holbrook, 1999; Gallarza *et al.*, 2011), now more than fifty years ago. However, despite its being a core concept, writers have long agreed on a lack of consistency concerning the nature of value, its characteristics, or its conceptualization (see for example, in chronological order, Zeithaml, 1988, p. 2; Dodds *et al.*, 1991, p. 307; Holbrook, 1999, p. xiii; Day and Crask, 2000, p. 42; Sweeney and Soutar, 2001, p. 204; Lin *et al.*, 2005, p. 318; Boksberger and Melsen, 2011, p. 229; Helkkula *et al.*, 2012, p. 60; Leroi-Werelds *et al.*, 2014, p. 430). Accordingly, because the concept has remained fuzzy, its measurement has proven elusive, despite various concrete proposals for scaling perceived value (e.g., Mathwick *et al.*, 2001; Sweeney and Soutar, 2001; Petrick, 2002; Martín-Ruiz *et al.*, 2008). The concept has constantly been revisited; indeed, “value is perhaps a chimera in the managerial and social sciences, but it has proved to be a compelling one” (Arnould, 2014, p. 29).

Recent state-of-the-art value research (Boksberger and Melsen, 2011; Gallarza *et al.*, 2011) suggests that this work has shifted since 2000 from a phase of conceptual interest to a phase of methodological development and measurement, this second phase being divided into two main perspectives (Gallarza and Gil-Saura, 2006): an *inter-variable* view that focuses on relationships between value and other variables (e.g., Cronin *et al.*, 2000; Ledden *et al.*, 2007) and an *intra-variable* view that emphasizes the different dimensions of value and the relationships between them (e.g., Sweeney and Soutar, 2001; Petrick, 2002). Within the first inter-variable perspective, decades of research have shown that value contributes to all positive forms of behavioral outcomes in a value-satisfaction-loyalty chain (e.g., Cronin *et al.*, 2000; Parasuraman and Grewal, 2000; Grace and O’Cass, 2005; Leroi-Werelds *et al.*, 2014). The present research adopts the second intra-variable perspective, in which the volume of empirical works is smaller and more heterogeneous. In this sense, the present paper tries to reduce the gap recently noted by Cronin: “although much theory has been advanced relative to the measurement of value, the marketing literature lacks a conceptualization and measures that reflect this theory” (2016, p. 261).

Most proposals for multidimensional measurements of value have focused mainly on services rather than on goods. Indeed, the value concept has long been recognized as crucial for the epistemology of services marketing (Nilson, 1992; Smith, 1999; Vargo and Lusch, 2004; Lin *et al.*, 2005; Martín-Ruiz *et al.*, 2008; Gummerus, 2013). Due to this centrality of value for service research, the word “value” appears in two of the ten “Research Priorities” identified in the *Journal of Service Research* by Ostrom *et al.* (2010, p. 4) and again in *JSR* in 2015 as one of the 12 priorities for service research (Ostrom *et al.*, 2015, p. 128). Moreover, the word “value” has also been explicitly considered in two of the four axioms from the latest reformulation of the Service-Dominant Logic or SDL (Lusch and Vargo, 2014, p. 15). Managerially, in a straightforward way, competitive advantages come from adding value through intangibles to both goods and services (Nilson, 1992; Gummerus, 2013). Academically, in the study of services, the value concept looms large among researchers interested in refining fundamental theories of services marketing (e.g., Grönroos and Voima, 2013;

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3 Gummerus, 2013; Lusch and Vargo, 2014), highlighting the customer's participation in
4 value co-creation (Grönroos, 2011; Yi and Gong, 2013). Value and services are
5 therefore inextricably linked in what could be called a nested relationship – both
6 conceptually and empirically, for academicians and practitioners – thereby encouraging
7 more research on service value.
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10 Among the abundant conceptual works on value, Holbrook (1994, 1999; Holbrook and
11 Corfman, 1985) has pioneered a view value as an aspect of the consumption experience
12 (Holbrook and Hirschman, 1982). He developed and refined this approach over a period
13 of two decades and ultimately presented a typology of value (Holbrook, 1999) that has
14 been considered “the most comprehensive approach to the value construct, because it
15 captures more potential sources of value than do other conceptualizations” (Sánchez-
16 Fernández *et al.*, 2009, p. 97). Specifically, Holbrook's value conceptualization includes
17 such aspects as economic, social, hedonic, and altruistic – organized into eight value
18 types – namely, efficiency, excellence, status, esteem, play, aesthetics, ethics, and
19 spirituality.
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24 Despite Holbrook's contribution to the conceptual literature on consumption behavior
25 and service experiences, there have been few attempts to operationalize and validate his
26 work on the theory of value. In this sense, Cronin's (2016, p. 261) aforementioned
27 diagnosis applies with special force to this author's contribution. Specifically, there is a
28 need for bridging the theoretical relevance of Holbrook's framework with its potential
29 as an operative measure of service value, a task not yet accomplished in the existing
30 literature. The present paper aims, first, at proposing and validating eight value scales
31 based on Holbrook's (1999) conceptual paradigm and, second, at finding empirical
32 support in a service setting for interrelationships between these value types within
33 Holbrook's three-dimensional scheme based on a $2 \times 2 \times 2$ structure. The paper thereby
34 seeks to obtain construct validity for Holbrook's multidimensional structure of value
35 types. As a further step and an extension of previous empirical research based on
36 Holbrook's conceptualization of value (e.g., Mathwick *et al.*, 2001; Gallarza and Gil-
37 Saura, 2006; Sánchez-Fernández *et al.*, 2009; Leroi-Werelds *et al.*, 2014), the main
38 contribution of the present paper stems from its being, to the best of authors'
39 knowledge, the first attempt to operationalize all of the eight categories in Holbrook's
40 paradigm, investigated simultaneously in one service experience, thereby adopting “an
41 integrative approach to consumer value” (Smith, 1999, p. 157). In this sense, the paper
42 follows the call by Smith (1999) for research on Holbrook's typology, which he
43 considers to have five key merits:
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46 *the recognition or assertion that (1) consumer value lies in the consumption*
47 *experience, not in the product; (2) different types of value may be obtained; (3)*
48 *these types of value may occur simultaneously and to varying degrees in any*
49 *consumption experience; (4) there is an interrelationship between the different*
50 *types of value that arise in consumption; and (5) the types of value may be*
51 *subject to a higher order classification (such as the dimensions proposed in*
52 *Holbrook's typology) (p. 149).*
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56 To pursue these claims, methodologically, findings are presented in three concatenated
57 phases: first, validating the eight value scales (1st, 2nd, and 3rd of Smith's claims);
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3 second, testing interrelationships among value dimensions according to the $2 \times 2 \times 2$
4 classification (4th of Smith's claims); and, third, proposing a higher-order classification
5 in a structural model (5th of Smith's claims).
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8 One fundamental premise when developing empirical research on value is the need for
9 adopting a contingency approach (Helkkula *et al.*, 2012; Arnould, 2014). That is, the
10 notion of value is "contextually bound" (Grönroos and Voima, 2013, p. 146). In this
11 sense, the present work aims at assessing a fully contextual service experience.
12 Adopting this contextualization makes sense given Holbrook's conceptualization of
13 consumer value as "situational" insofar as it "depends on the context in which the
14 evaluative judgment is made" (Holbrook, 1999, p. 7).
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18 The illustrative service encounter of choice is a hospitality experience because – in that
19 context, through various analyses – meaningful relevance is found for each of
20 Holbrook's value dimensions, enabling a broader and deeper example of touristic
21 consumer behavior, as anticipated by the different cases of tourism and hospitality
22 services mentioned in the contributions collected by Holbrook (1999) – for example,
23 Grayson (1999, pp. 107, 118), Leclerc and Schmitt (1999, pp. 31, 39), Oliver (1999, p.
24 51), and Richins (1999, pp. 86, 91). Further, according to comparative work on the use
25 of value scales, the prescriptive flowchart proposed by Leroi-Werelds *et al.* (2014, p.
26 444) suggests that Holbrook's work when researching value typologies is a productive
27 approach in the case of "feel" products (such as tourism and hospitality). Additionally,
28 in other recent work, value dimensionality has also been a fruitful lens for exploring and
29 analyzing sophisticated hospitality experiences such as a community-based homestay
30 visit (e.g., Jamal *et al.*, 2011), heritage settings (e.g., Laing *et al.*, 2014), boutique hotels
31 (e.g., Sørensen and Jensen, 2015), and adventure tourism (e.g., Prebensen and Xie,
32 2017), thereby giving support to the choice of a hospitality setting for the empirical
33 work.
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38 The balance of the present paper is organized as follows. First, the conceptual
39 framework is divided into two parts – a review of value typologies (with the help of a
40 comprehensive table highlighting *trade-off*, *dynamic*, *strategic*, *relational*, and
41 *experiential* approaches), followed by the introduction of Holbrook's typology of
42 consumer value. Second, the methodology section presents a service-centered hotel-
43 relevant value-based questionnaire. Third, the results section follows, with the three
44 concatenated phases, where correlation, multiple regression, higher-order measures, and
45 structural equation modelling examine relationships among dimensions conceptually
46 related in Holbrook's framework. Finally, various conclusions state the main
47 contributions of this work in line with the endorsement of Holbrook's (1999) theoretical
48 structure for a service-value evaluation, acknowledging some limitations and
49 encouraging future theoretical and methodological research on service value.
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53 2. Perceived Value in Services: Typologies and Dimensions

54 2.1. Value and services

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56 The value concept is crucial in the services literature for the fundamental distinction
57 between goods and services in two senses. (1) First, ontologically, goods as "need
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satisfiers” have a nested relationship with services. In this sense, Holbrook himself (1999, p. 9) strongly believes in the conceptualization of all product offerings as performing services “in their capacity to create need- or want-satisfying experiences” in the process of conferring customer value. Another way of envisioning the same ontological reality says that “within contemporary discourse around service-dominant logic, phenomenologically (experientially) determined value has been placed at the center of value discussion” (Helkkula *et al.*, 2012, p. 59). (2) Second, in practice, goods and services are complementary in the marketplace, as (tangible) values are added to intangible offerings (services) and as (intangible) values are added to tangible offerings (goods) (Nilson, 1992). This competitive relevance of adding value through intangibles shows that value is also crucial for manufacturing firms (Vargo and Lusch, 2004; Gummerus, 2013). All this thereby invites more research on service-value management.

2.2. Review of value typologies

One of the richest and most productive areas in research on value involves analysis of its conceptual content – that is, its components and the relationships among them (Holbrook, 1994, 1999; Holbrook and Corfman, 1985; Lin *et al.*, 2005; Gallarza and Gil-Saura, 2008; Sánchez-Fernández *et al.*, 2009), referred to as “intra-variable value research” (Gallarza and Gil-Saura, 2006, p. 438). Indeed, consideration of value typologies lies at the very heart of the value concept in that “one can understand a given type of value only by considering its relationship with other types of value” (Holbrook, 1999, p. 4).

Table 1 offers a selection of works from 1982 to 2016, with meaningful insights in this intra-variable perspective – mentioning the scope, the setting, and the precise value types depicted in each work. The third column in Table 1 regroups the different approaches into three categories (*i.e.*, *trade-off*, *dynamic*, and *experiential*), all three further explained in Table 2 through a respective illustrative conceptualization, its associate nomenclature, representative scales, and potential strengths-and-weaknesses. All three approaches are reviewed in the following paragraphs.

 Table 1 and Table 2 about here

First, following Zeithaml’s (1988) influential approach, the conceptualization of value as a *trade-off*, views value as a two-way concept, involving the consumer’s balance of benefits-versus-costs available in a market option (e.g., Cronin *et al.*, 2000; Lin *et al.*, 2005; Martín-Ruiz *et al.*, 2008; Beneke and Carter, 2015). The main empirical work from the trade-off perspective is Dodds *et al.* (1991)’s one-dimensional value-for-money scale (see Table 2), replicated in Grace and O’Cass (2005), Sweeney *et al.* (1999), and Leroi-Werelds *et al.* (2014). Although very easy to operationalize, this multiplicative approach (value as a ratio) has shortcomings insofar as contemporary consumption does not allow a clear specification of the relevant benefits and sacrifices (Cronin, 2016). Thus, this two-dimensional view only approximates more complex typologies because both benefits and costs subsume further aspects of value (Oliver, 1999). As a result, more recently, the *trade-off* approach has been combined with other broader perspectives, as shown by the examples found in Table 1 (e.g., Gallarza and Gil-Saura, 2006; Ledden *et al.*, 2007).

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5 A second approach that cuts across the various typologies in Table 1 is the *dynamic*
6 view (see the associated nomenclature, strengths-and-weaknesses, and illustrative
7 conceptualization in Table 2). This *dynamic* approach, valuable for both marketing
8 strategy and consumer research, considers different types of value in relation to the
9 moments before and after purchase or consumption (e.g., Lovelock, 1996; Woodruff,
10 1997; Oliver, 1999; Parasuraman and Grewal, 2000) and has the merit of considering
11 value dimensions as drivers for achieving competitive advantages (Nilson, 1992; Gale,
12 1994; Parasuraman, 1997; Woodruff, 1997; Day, 2000). The *dynamic* approach is
13 grounded on the microeconomic origins of the value concept, through the seminal
14 distinction between *acquisition value* and *transaction value* (Monroe, 1979; Thaler,
15 1985; Monroe and Chapman, 1987). It parallels the distinction between value-in-use
16 and value-in-exchange, and has produced strategic marketing-oriented research on value
17 (e.g., Woodruff, 1997; Parasuraman and Grewal, 2000), as well as empirical works
18 based on utilitarian consumption behavior (e.g., Jayanti and Ghosh, 1996; Al-Sabbahy
19 *et al.*, 2004). Lately, the *dynamic* approach has been transformed for a better
20 understanding of service idiosyncrasy where customer value corresponds to “dynamic,
21 interactive, non-linear, and often unconscious processes” (Payne *et al.*, 2008, p. 86).
22 This transformation encompasses contemporary proposals in line with the process of
23 value creation, production, and co-creation (e.g., Grönroos, 2011; Grönroos and Voima,
24 2013), favoring the idea of a necessary shift from “exchange value centrality” to “use
25 value centrality” (Lusch and Vargo, 2014, p. 7).
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30 The third approach considered in Tables 1 and 2 is the *experiential* perspective on
31 value. This approach attracted considerable attention during the early 1980s via a shift
32 from primarily utilitarian conceptions of human behavior in the marketplace toward an
33 expanded experiential and phenomenological perspective on the hedonic, symbolic, and
34 aesthetic aspects of consumption (Holbrook and Hirschman, 1982; Holbrook and
35 Corfman, 1985). As shown in Table 2, the experiential perspective has various strengths
36 but also certain weaknesses. For example, regarding the latter, it is difficult to fully
37 operationalize and is therefore often mixed with other perspectives such as the *trade-off*
38 approach, as when combining the symbolic and emotional aspects of consumption with
39 the benefits and costs (e.g., Wang *et al.*, 2004; Wu and Liang, 2009; Eid and El-Gohary,
40 2015; Pandža Bajcs, 2015).
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44 Representative works that have pursued the experiential approach include (1) Babin *et al.*'s
45 (1994) two-dimensional scale of shopping value – with subsequent replications in
46 different retailing settings such as discounts (e.g., Carpenter, 2008; Carpenter and
47 Moore, 2009) or malls (e.g., Stoel *et al.*, 2004; Allard *et al.*, 2009; Jackson *et al.*, 2011;
48 Lloyd *et al.*, 2014); (2) research by Mathwick *et al.* (2001, 2002) that addresses four
49 dimensions of Holbrook's value typology with special interest in both on- and off-line
50 retailing formats; and (3) Sheth *et al.*'s (1991) work distinguishing five types of value
51 (*functional, social, emotional, epistemic, and conditional*), further applied to security
52 firms by Wong *et al.* (2004) and to educational services by Ledden *et al.* (2007), also
53 leading to the PERVAL scale proposed by Sweeney and Soutar (2001) and replicated
54 by others (e.g., Wong and Dean, 2009; Chi and Kilduff, 2011; Grace and Weaven,
55 2011).
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3 The experiential view is no longer new, but the dual hedonic/utilitarian concept has
4 continued to interest academic writers across the decades, as shown in Table 1, with
5 retailing and tourism emerging as two paradigmatic experiential service settings. In the
6 former connection (retailing), value dimensions enhance offerings as hybrids between
7 goods and services – e.g. “visual appeal” as aesthetic value in Mathwick *et al.* (2002) or
8 “self-expressive” value as a social dimension in Seo and Lee (2008). In the latter
9 connection (tourism), numerous investigations have applied the experiential approach to
10 various tourism-related services (e.g., Petrick, 2002; Sánchez *et al.*, 2006; Gallarza and
11 Gil-Saura, 2006; Diep and Sweeney, 2008; Yuan and Wu, 2008; Wu and Liang, 2009;
12 Eid and El-Gohary, 2015; Prebensen and Xie, 2017).
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15 16 2.3. Holbrook's typology of consumer value

17 Among the many approaches to studying value (see Tables 1 and 2), the
18 conceptualization proposed by Holbrook (1994; 1999; Holbrook and Corfman 1985)
19 has gained increasing traction. Its broad multidisciplinary nature, the contributions from
20 other authors, and his quest to achieve a “systematic and integrated approach”
21 (Holbrook, 1999, p. 3) make Holbrook’s framework the object of broad conceptual
22 discussions among authors (e.g., Rust and Oliver, 1996; Brown, 1999; Oliver, 1999;
23 Smith, 1999; Boksberger and Melsen, 2011), as well as a source of inspiration for
24 empirical investigations such as those by Babin *et al.* (1994) for shopping values;
25 Mathwick *et al.* (2001, 2002) for Internet and catalog shopping; Babin and Kim (2001)
26 or Gallarza and Gil-Saura (2006) for students’ trips; Sánchez-Fernández *et al.* (2009)
27 for restaurants; and Leroi-Werelds *et al.* (2014) for “think” and “feel” products. In this,
28 paraphrasing the commentary by Smith (1999, p. 157), Holbrook’s framework serves as
29 a “paradigm” for research on value, and its merits encompass strengths from all
30 approaches presented in Table 2, as the following paragraphs make clear.
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35 Holbrook (1999) defines value as “an interactive relativistic preference experience” (p.
36 5). In keeping with its axiological origins, the term used is “value for the consumer” so
37 that Holbrook’s conceptualization coincides with what the *trade-off* approach calls
38 “perceived value” insofar as one of the characteristics of value that he emphasizes
39 involves its (partial) subjectivity. Regarding sacrifice- or cost-based inputs to value,
40 Holbrook himself mostly considers value as a “price-independent preference function”
41 (1999, p. 187), although the multiplicative form (value as a ratio of outputs to inputs)
42 finds a place in the type referred to as “efficiency” (the first cell in Holbrook’s matrix).
43 Furthermore, Holbrook’s conceptualization also covers the essentials of the *dynamic*
44 approach, mainly expressed in the underpinnings of the SDL. In describing value as
45 idiosyncratic, experiential-and-contextual, and experientially determined by the
46 beneficiary in a “phenomenological sense” (p. 7), the work by Vargo and Lusch (2008)
47 clearly parallels Holbrook’s line of research in pioneering the experiential view of
48 consumption (Holbrook and Hirschman, 1982) and in writing later that “Value resides
49 ... *in* and only *in* (or *inn*) a consumption experience” (Holbrook, 2006, p. 213).
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54 Holbrook’s value typology recognizes three distinctions or dimensions that enable
55 classification of the different types of value that can arise in the consumption
56 experience: *extrinsic* versus *intrinsic* value; *self-oriented* versus *other-oriented* value;
57 and *active* versus *reactive* value. The combination of these three distinctions in a 2x2x2
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matrix gives rise to eight types of value – efficiency, excellence, status, esteem, play, aesthetics, ethics, and spirituality. A more parsimonious classification would bypass the active-reactive distinction and consider only four major value types – economic, social, hedonic, and altruistic.

The Holbrook typology of consumer value has been praised because “it permits a simpler adaptation to another series of consumption experiences such as religion, the arts, and leisure experiences” (Day and Crask, 2000, p. 42). But, because of that, “extending the perspective to a more abstract level makes it difficult to compare with other typologies” (Day and Crask, 2000, p. 42). Thus, Oliver (1999) notes problems in orienting the axiological origin of Holbrook's proposal to the consumer goods-and-services market (1999, p. 44). Perhaps this explains why Holbrook's value typology – though it has inspired several empirical studies of service offerings (e.g., Mathwick *et al.*, 2001; Gallarza and Gil-Saura, 2006, 2008; Sánchez-Fernández *et al.*, 2009; Leroi-Werelds *et al.*, 2014) – has not yet been fully operationalized, thus reflecting Cronin's (2016, p. 261) comments on the lack of value measures.

The touristic experience of a visit to a hotel provides an ideal situation for empirically investigating Holbrook's conceptually fruitful typology because tourism services are by definition multidimensional (Al-Sabbahy *et al.*, 2004; Sánchez *et al.*, 2006; Gallarza and Gil-Saura, 2008; Sparks *et al.*, 2008); because this type of consumption experience entails a high level of involvement (Jayanti and Ghosh, 1996; Gallarza and Gil-Saura, 2008; Wu and Liang, 2009); and because hospitality and tourism settings are fully experiential services (Yuan and Wu, 2008; Wu and Liang, 2009), as assumed by the whole line of research from Holbrook (Holbrook and Hirschman, 1982; Holbrook, 1999).

3. Method

3.1. Study aims

Despite the wide and deep research on value dimensionality (see Table 1), it is noticeable that “the lack of agreement among scholars with respect to the definition and the concept of perceived value results in inconsistent and incommensurable empirical measures” (Boksberger and Melsen, 2011, p. 229) – which leads, even nowadays, to the aforementioned opinion of Cronin (2016). Indeed, these and other aspects of value research have problematized the investigation of value, as “this conceptual idiosyncrasy or methodological quirk of the value research has caused a vicious circle for researchers, compromising the reliability and validity of value measures” (Gallarza *et al.*, 2011, p. 182). The present study seeks to reduce this “vicious circle” by demonstrating construct validity for a set of eight scales matching Holbrook's 2x2x2 conceptual framework and an appropriate underlying third-order factorial structure. In doing so, this paper seeks to bridge the gap between the conceptual merits of Holbrook's typology of value and the empirical evidence supporting it, thereby broadening the relevance of Holbrook's proposal for service-value research.

Accordingly, the empirical work follows Smith's (1999) suggestions for further research on Holbrook's paradigm. Specifically, Table 3 shows the sequence designed to address the two aims, in accord with Holbrook's conceptual scheme. First, eight scales

are proposed and constructed as relevant to the understanding of service value as a multidimensional construct. Second, inspired by Smith's third and fourth claims, the study looks for evidence supporting the interrelationships between value types. And, third, corresponding to Smith's fifth claim, six value indices are built and tested as a higher-order classification in a structural model.

 Table 3 about here

An *ad-hoc* questionnaire was built with a proposed set of eight scales. The sequential procedure pursues the first and second aims by following classical works (Churchill, 1979; Peter and Churchill, 1986) as well as more recent ones (Netemeyer *et al.*, 2003; Bearden *et al.*, 2011) on scale validation. The procedure, techniques, exhibits in the text, and references used in each step appear in Table 3.

3.2. Item generation for building value scales based on Holbrook's conceptualization

The first step for developing scales and measures corresponds to specification of the domain of the construct via a literature review (Churchill, 1979). In this case, regarding Holbrook's conceptualization of consumer value, eight types of value were specified: efficiency, excellence, status, esteem, play, aesthetics, ethics, and spirituality. Moreover, these eight types are theoretically interrelated and subject to a higher-order classification (Smith, 1999).

A mixed process led to the development of items to tap each of the eight value types (see item generation step in Table 3): a literature search, focus groups, and a consultation with an expert. To reflect the complexity of the value construct, this mixed process combined two approaches, inductive and deductive (Hinkin *et al.*, 1997) – “inductive ... when exploring an unfamiliar phenomenon where little theory may exist” (p. 102) (in the case of Holbrook's typology, the altruistic scales and the distinction between status and esteem as types of social value) and deductive when building “a theoretical definition of a construct which is then used as a guide for the creation of items” (p. 102) (in this case, value dimensions that already exist in the relevant value literature). A similar (mixed) procedure for generating indicators was used by Ruekert and Churchill (1984) who employed a literature review and an exploratory phase of qualitative in-depth interviews.

On one hand, for the deductive approach, in accordance with Leroi-Werelds's (2014) opinion on the advantages of Holbrook's classification – i.e., that “existing scales are available for some of Holbrook's value types, thereby limiting the time and effort needed to design a suitable measurement instrument” (p. 444) – a literature search explored the scaling of some value types with long traditions of investigation. These included service quality (generalized from the well-known work by Cronin *et al.*, 2000) and the social values (esteem and status, using indicators adapted from social value scales found in works by Nasution and Mavondo [2008] on hotels and by Sparks *et al.* [2008] on the time-share industry). Play and escapism also contained items from Sparks *et al.*'s (2008) scales of fun and relaxation. And efficiency and aesthetics contained items from work by Wu and Liang (2009) on luxury restaurants (i.e., from their environmental factors and aesthetics scales).

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3 On the other hand, as advocated by Bearden *et al.* (2011), the inductive approach in this
4 mixed process for item generation consisted of focus groups with tourism consumers
5 and consultation with an expert. First, qualitative information was gathered through four
6 focus groups composed of consumers with different profiles so as to explore, in general,
7 the possibility of experiencing the eight relevant value types during a hotel stay. For
8 example, comments relevant to the extrinsic-intrinsic dimension included the following:
9 “Sometimes aesthetics is in contradiction with the functional aspects.... I remember
10 once being in a very modern and minimalist hotel, where the wash basin was so narrow
11 that I couldn’t shave myself” and “When a hotel makes collaboration with an NGO, we
12 can consider it as a higher social value, but just if it is not done with a lucrative
13 purpose.” These and other statements surfacing in the focus groups (details provided on
14 request) suggested insights useful in drafting measures of the eight value types. Then,
15 by way of an expert consultation, an initial draft of the questionnaire was sent to
16 Holbrook for his feedback. A similar process of combining focus groups with expert
17 consultation (marketing and consumer behavior professors) was used by Netemeyer *et*
18 *al.* (2004) as preliminary steps for scale validation. In this case, Holbrook’s contribution
19 focused on the need to include aspects of aesthetics (visual, olfactory, and auditory
20 factors) and to pursue a clearer separation of social indicators into active (status) and
21 reactive (esteem), affecting one item from the esteem scale – taken from Sparks *et al.*
22 (2008) – that matches better the conceptual nature of status, due to its active nature.
23 Holbrook approved the inclusion of indicators for escapism in the altruistic dimension
24 as an adaptation of spiritual values – recognized in his work as characteristic of a
25 connection with nature, the cosmos, or a deity and, therefore, difficult to adapt to a
26 tourism-based consumption experience. Table 4 shows the indicators for each of the
27 eight value dimensions and the three sources (literature search, focus groups, and expert
28 consultation) used to build the relevant scales (with deleted items appearing in bold
29 characters).

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34 Table 4 about here
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38 The final questionnaire contained 45 indicators that reflected the different aspects of the
39 touristic experience of staying at a hotel – namely, **economic**, including *efficiency*
40 (lighting, temperature, accessibility, bathroom fittings) and *service quality* (competence,
41 courtesy, respectfulness of staff); **social**, including *status* (prestige for lodging in this
42 hotel, good impression on other people) and *esteem* (feelings of self-worth, personal
43 achievement, pride); **hedonic**, including *play* (fun activities, pleasure-enhancing
44 services, facilities to enjoy) and *aesthetics* (furniture, decoration, architecture); and
45 **altruistic**, including *ethics* (respect and care for the environment from the organization,
46 collaboration with social causes, a fair price policy, application of rules and regulations)
47 and *escapism* (relaxation, breaking with routines, restfulness). The questionnaire – with
48 all indicators positively expressed on a five-point Likert scale – was administered by
49 personal interviews with a non-probabilistic purposive sample of 585 respondents in the
50 lobbies of four- and five-star hotels in a Mediterranean country. The sample was
51 balanced between men (52.1%) and women (47.9%), between domestic (51.2%) and
52 international (48.8%) tourists that were mainly heavy travelers (66.2% with two to four
53 trips a year, 20.5% with more than four).

4. Results

4.1. First aim: Scales validation

To further the first aim – that is, to validate the proposed multidimensional value scales – various analyses assessed the relevant psychometric properties (see Table 3) following procedures recommended by the relevant literature (Churchill, 1979; Peter and Churchill, 1986; Netemeyer *et al.*, 2003; Bearden *et al.*, 2011).

4.1.1. Purifying the measures

As a first step for scale validation (Churchill, 1979), to purify the measures, a principal components analysis (PCA) was conducted on the 45 indicators with a procrustean rotation (Schönemann, 1966) that enhances the structural interpretation. For the 45 items, a nine-components structure emerges, explaining 72.8% of the total variance, with nine eigenvalues larger than 1.0 (following Kaiser's [1960] rule). To enhance the interpretability of this structure, an orthogonal procrustean rotation was performed, with an appropriate target matrix. This analysis showed that the eighth item of efficiency ("The location of the hotel is easy to reach," surfaced in focus groups but only weakly related to other items) could be eliminated. The final outcome is an eight-components structure (71.6% of the total variance), corresponding better to Holbrook's conceptualization. Status and esteem are closely related and difficult to separate, but this is consistent with the literature on value, as "Nowhere in the Typology of Consumer Value is the demarcation between adjacent areas more problematic than for the two cells in the bottom left-hand corner [i.e., status and esteem]" (Holbrook, 1999, p. 188).

4.1.2. Assessments of reliability and internal consistency

The second step in the scale-validation process corresponds to reliability assessment (Churchill, 1979; Peter and Churchill, 1986) – combined, in this case, with the predictive ability associated with the eight value scales. This step was performed through a structural model (Figure 1), using the value-satisfaction-loyalty chain as a nomological context (e.g. Cronin *et al.*, 2000; Gallarza and Gil-Saura, 2006, 2008). A similar procedure has been followed in other value-scale validations from the previous literature (e.g., Lin *et al.*, 2005; Martín-Ruiz *et al.*, 2008; Leroi-Werelds *et al.*, 2014). The relevant calculations search for the ability of each scale to play the role of antecedent of both satisfaction (using a mono-item measure from Kattara *et al.* [2008]) and loyalty (using Zeithaml *et al.*'s [1996] behavioral-outcomes scale). The model was estimated with Partial Least Squares (PLS) (Wold, 1985; Tenenhaus *et al.*, 2005).

Figure 1 about here

The results show the scales' unidimensionality and internal consistency. Here, reliability was measured by Cronbach's alpha, according to the 0.70 threshold (Nunnally and Bernstein, 1994) and by Composite Reliability (CR) (Werts *et al.*, 1974). Only the aesthetics and ethics scales presented poor initial results. For aesthetics, we decided to remove the two last items that referred to smells and views – added, after consultation with Holbrook, to Wu and Liang (2009)'s aesthetics indicators (because the correlation matrix for the six-item scale has two larger-than-1.0 eigenvalues). Cronbach's alpha then increased from 0.86 to 0.91, and the loadings associated with

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3 both items are significantly lower than those associated with the remaining four items
4 (MacKenzie *et al.*, 2011). For ethics, the first three items were removed, with similar
5 results (Cronbach's alpha increasing from 0.76 to 0.98); these items corresponded to
6 precise ethical concerns raised during the focus groups with regard to hotels'
7 collaboration with NGOs and green behavior (Table 4); the two remaining indicators
8 reflect a more general ethical orientation. Table 5 shows the result of this second step in
9 the form of internal consistency measures of the depurated scales in the context of the
10 estimated model – i.e., Cronbach's alpha and Composite Reliability (CR) for each
11 construct. Both statistics satisfy the reliability conditions. Specifically, the minimum
12 Cronbach's alpha is 0.83 and the minimum CR is 0.88 (efficiency scale in both cases).
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4.1.3. Assessments of nomological, convergent, and discriminant validity

The next step in scale construction corresponds to validity (Churchill, 1979). Among the different types of validity, the present study tests nomological, convergent, and discriminant validity, as these three help in establishing construct validity (Peter and Churchill, 1986; Netemeyer *et al.*, 2003), thereby facilitating progress toward the aim of validating a multidimensional set of eight value scales based on Holbrook's theoretical framework.

Nomological validity exists when the values of a construct elaborated with the validated scales are related to those of another construct so as to offer empirical support for the relevant theoretical relations (Cronbach and Meehl, 1955). Nomological validity of the eight value scales is demonstrated by the structural model shown in Figure 1, which supports previous literature arguing that aspects of value should explain both satisfaction and loyalty (Cronin *et al.*, 2000; Lin *et al.*, 2005; Martín-Ruiz *et al.*, 2008; Gallarza and Gil-Saura, 2006; Cronin, 2016). In what follows, nomological validity will be further tested by predictions of value-satisfaction-loyalty by indices build upon Holbrook's 2x2x2 structure (Figure 3).

Convergent validity is shown in Table 5, as AVEs for the eight constructs are higher than the 0.5 threshold (Fornell and Larcker, 1981). Convergence also appears in Table 6, with the outer loadings (in bold figures) higher than the 0.7 threshold in all cases (except for the first item in efficiency, with an outer loading of 0.62). As suggested by Peter and Churchill (1986), these aspects of convergent validity cohere with the scales' reliability scores (Table 5).

To assess discriminant validity, three complementary criteria were applied (Table 3). First, as shown in Table 6, the loading of each item is greater than its cross loadings (Barklay *et al.*, 1995; Chin, 1998). Second, following Fornell and Larcker (1981), the square root of the AVE of each construct is greater than the correlation between that construct and each other construct (Table 5). And, third, as an evolution from the Multi-trait-Multi-method approach suggested by Churchill (1979, p. 66) for validity testing,

the Hetero Trait - Mono Trait ratio of correlations (HT/MT) was calculated (Henseler *et al.*, 2015), showing that all are under the maximum acceptable value of 0.85 (Clark and Watson, 1995; Kline, 2011). The highest HT/MT is for the pair of constructs status and esteem (0.75), and this value actually helps to verify the anticipated partial overlapping of these two scales.

Table 6 about here

4.2. Second aim, part one: Interrelationships between value types

4.2.1. Interrelationships between value types, regressions, and Variance Inflation Factors (VIF)

Following the second aim and corresponding to the fourth claim by Smith (1999), we now test the degree of relation among the eight value scales through linear regression for each value type with all the other value constructs as explanatory variables (Table 7). These regressions give us a measure of the explanation of each construct by each of the other constructs (the standardized multiple regression coefficients) and an overall indication of the variance in each construct explained by the other constructs (the $R^2_{i-Other}$ statistic). For each construct (Table 7), the Variance Inflation Factor (VIF) is also reported. Here, none of the eight value constructs has a VIF approaching the conservative threshold of 5.0 (Draper and Smith, 2014).

Table 7 about here

As posited by Smith's (1999, p. 149) third claim, Table 7 reflects that the relationships between Holbrook's types of value vary in intensity. The $R^2_{i-Other}$ values show that only ethics appears to be quite independent (16.6%) from the rest of value constructs.

The results of this first step toward the second aim — relevant to the fourth claim by Smith (1999) — reflect a clear overlapping of value types. For example, as further shown in what follows, the relationship of escapism to service quality (0.34) stands out in the experience investigated (hospitality consumption where the interaction with the staff – assessed in service quality – and the customers' wishes of relaxation are predominant aspects of this experiential service). All this provides evidence for Smith's (1999) third claim (i.e., that “types of value may occur simultaneously and to various degrees in any consumption experience”). It is for social values (status and esteem) that the closest interrelation appears – i.e., esteem is most strongly related to status (0.65) and vice versa (0.47). See also how, in the last column, status is the most interrelated value dimension (63.5%). These results match Holbrook's conceptual statements, cited earlier (Holbrook, 1999, p. 188). They also coincide with the intimations of other authors regarding this pair – status and esteem – where this difficulty of their differentiation has also been noted (e.g., Gallarza and Gil-Saura, 2006; Leroi-Werelds *et al.*, 2014). As Richins (1999) has commented in this connection, “In empirical analysis

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3 it has been difficult to distinguish between active [e.g., status] and reactive [e.g.,
4 esteem] sources of value” (p. 86).
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7 4.2.2. *Simple versus partial correlations to test interrelationships between value types*

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9 So far, the results have indicated that strong interrelations occur for the pair of social
10 values in Holbrook’s conceptualization – status (active) and esteem (reactive) – thereby
11 implying that the active/reactive distinction fails to discriminate between the members
12 of this pair. Bearing this in mind (according to the fourth of Smith’s claims) so as to
13 explore the interrelationships between values sharing two of the three distinctions in
14 Holbrook’s conceptualization, Table 8 compares the simple linear correlation between
15 pairs of value types with the partial correlation between them when controlling for the
16 effect of each one of the other value types (Spirtes *et al.*, 1993). As Holbrook (1999, p.
17 9) points out, one dimension of value cannot be understood in isolation from the rest.
18 The following analysis focuses on the simple linear correlation coefficients between the
19 *economic* (extrinsic, self-oriented) types (efficiency and service quality), the *hedonic*
20 (intrinsic, self-oriented) types (play and aesthetics), the *social* (extrinsic, other-oriented)
21 types (status and esteem), and the *altruistic* (intrinsic, other-oriented) types (ethics and
22 escapism).
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26 Table 8 about here
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31 In all the four cases (economic, hedonic, social, and altruistic pairs of constructs), it is
32 clear that the estimated simple correlation remains almost as strong when blocking for
33 the effect of any of the other value types. Furthermore, in accord with earlier comments
34 on the regressions in Table 7, social values were again the value types best explained by
35 each other (0.68), thereby recalling what Richins (1999, p. 86) and Holbrook (1999, p.
36 188) have recognized – namely, that these are the two value types most difficult to
37 delimit conceptually.
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40 In sum, for the relations between pairs of value types, the results show empirical
41 support for Holbrook’s prediction (1999, p. 188) that the active/reactive distinction is
42 less pronounced than others. It can therefore be stated that interrelationships are
43 stronger between the value types that share the conceptual extrinsic-versus-intrinsic and
44 self-versus-other-oriented distinctions in Holbrook’s typology (1999) and that these
45 pairings, as shown in Table 8, support what he recognizes as a more parsimonious
46 classification by eliminating the active-versus-reactive distinction – namely, economic,
47 social, hedonic, and altruistic types of value.
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51 4.3. *Second aim, part two: Value as a higher-order construct*

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53 As a further methodological step toward the second aim (Table 3), the last
54 recommendation by Smith (1999) is followed, aiming to explore the hierarchical
55 dimensionality of customer value, all this in line with Holbrook’s conceptualization of
56 value as “an interconnected system of related aspects that overlap and combine to
57 constitute the emergent phenomenon of consumer value” (1999, p. 5). Here, as
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mentioned in Table 3, the approach resembles other empirical work on higher-order service-value dimensionality (e.g., Lin *et al.*, 2005; Martín-Ruiz *et al.*, 2008; Lloyd *et al.*, 2011; Yi and Gong, 2013) but combines formative and reflective structures where value types arise from reflective scales but where these types are formative elements for the construction of indices of value, to follow Holbrook's three-dimensional paradigm. PLS path modelling is again the technique chosen, which the literature recognizes as good for estimating measurement models that include both formative and reflective indicators (Martín-Ruiz *et al.*, 2008; Leroi-Werelds *et al.*, 2014).

4.3.1. Indices of value following Holbrook's 2x2x2 structure

To build the structure, as a second- or third-order construct, the Hierarchical Components Approach (HCA) initially suggested by Wold (1982) and also known as the Repeated Indicators Approach (Wold, 1982; Lohmöller, 1989) or the Superblock Approach (Tenenhaus *et al.*, 2005) was used. In this case, six indices are built (extrinsic, intrinsic, self-oriented, other-oriented, active, and reactive), where data are arranged in four blocks for each index, in line with Holbrook's structure of value dimensions. As an illustration of the method followed to build the six indices, Figure 2 shows the structural model for the intrinsic value index, a second-order construct.

Figure 2 about here

The latent variables ξ_{Play} , $\xi_{\text{Aesthetics}}$, ξ_{Ethics} , and ξ_{Escapism} represent a partial index associated with each block of variables (i.e., with each intrinsic value type). The latent variable $\xi_{\text{intrinsic}}$ represents a global index of consumer perception of intrinsic value types (the *intrinsic* index) and is constructed by combining the 16 indicators of the four intrinsic types of value. The remaining five indices were built in the manner just shown for intrinsic value. Table 9 shows the coefficients obtained for the six models.

Table 9 about here

4.3.2. Interrelationships among value indices

A further step toward the second aim involved an examination of how the value indices are interrelated in the 2x2x2 classification, analyzing simple correlations between pairs of indices (Table 10) and differences in simple and partial correlations between pairs of complementary indices (Table 11).

The correlation matrix for the six indices (Table 10) shows interrelations with different intensities for certain axes of Holbrook's typology. Specifically, the correlations between pairs of antagonist indices (those that do not share any construct in Holbrook's classification) are logically smaller than those that share two constructs. However, these correlations remain rather high (above 0.70), as different aspects of the same one

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3 consumption experience are analyzed in the investigation of construct validity among
4 Holbrook's eight value types.
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11 First, all pairs of indices have high simple correlations, which is easily explained for the
12 indices that share constructs (e.g., 0.84 for intrinsic and self-oriented). The highest
13 correlations are between the extrinsic index and the self-oriented index (0.95), between
14 the self-oriented index and the reactive index (0.94), and between the extrinsic index
15 and the reactive index (0.94). Taken together, these linkages appear to reflect the
16 salience of the service-quality dimension in the value experience investigated.
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25 Second, concerning the three pairs of complementary indices, simple correlations are
26 also high, but the lowest among all pairs, which jibes with the 2x2x2 value
27 conceptualization – i.e., extrinsic and intrinsic (0.75), self-oriented and other-oriented
28 (0.73), and active and reactive (0.72). Nevertheless, Table 11 also shows that, when
29 looking at each pair of complementary indices, the partial correlation vanishes or even
30 changes its sign when blocking for the effect of each other index. Specifically, for the
31 self-other pair of indices, the simple correlation drops from 0.73 to 0.09 when blocking
32 for the effect of the intrinsic index; to 0.20 when blocking for active; to -0.26 when
33 blocking for extrinsic; and to -0.30 when blocking for reactive. Something similar also
34 occurs for the other two pairs of mutually exclusive indices (Table 11). Consequently,
35 the pairs of complementary indices (extrinsic-intrinsic, self-other, and active-reactive)
36 do reflect different and even opposite evaluations, encountered simultaneously in the
37 same experiences, thereby giving support to Holbrook's conceptualization and to the
38 third and fourth claims by Smith (1999, p. 149).
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41 42 43 4.3.3. Value as a third-order structure

44 A final step, examining the "higher-order classification" of value dimensions, aimed at
45 supporting the fifth statement by Smith (1999, p. 149). Here, because previous analyses
46 showed some salience of the extrinsic/intrinsic distinction over the other two, a final
47 higher-order structural model was built (Figure 3) and tested with PLS, where overall
48 value is conceived as a third-order value measure, with extrinsic and intrinsic indices
49 being second-order latent variables built upon the eight value types (four for each) and
50 with two extra endogenous variables (satisfaction and loyalty) representing the value-
51 satisfaction-loyalty chain as a nomological context (e.g., Cronin *et al.*, 2000; Baker *et*
52 *al.*, 2002; Gallarza and Gil-Saura, 2006, 2008) to assess the predictive ability of the
53 value indices.
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57 Figure 3 about here
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Here, the extrinsic index has a stronger link with the third-order variable (paths of 0.64 from extrinsic versus 0.42 from intrinsic). Between the second-order variables, the strongest antecedent for intrinsic value is escapism (0.48) and for extrinsic value is service quality (0.61), both being reactive values. These results show, in accord with other works on service value in hospitality, how relaxation (e.g., Kim and Perdue, 2013) and service-related interactions with staff (e.g., Sørensen and Jensen, 2015) are prominent aspects of the tourist experience; they also emphasize the old-but-always-true relevance of providing service quality when creating value in service settings (Sweeney *et al.*, 1999; Cronin *et al.*, 2000; Martín-Ruiz *et al.*, 2008) and especially in tourism-related contexts (Jayanti and Ghosh, 1996; Petrick, 2002; Al-Sabbahy *et al.*, 2004).

Among the intrinsic types, ethics shows the weakest link (0.11). As works on altruistic value are rather scarce, discussion of this result is difficult, especially for an ad-hoc scale, limited after depuration to one single aspect of ethics. Among the extrinsic types, the other-oriented social values show weaker paths (0.21 for status and 0.15 for esteem), and the self-oriented economic values show stronger ones (0.26 for efficiency and especially 0.61 for service quality). This unbalanced result between economic values accords with previous works on value in hospitality (e.g., Gallarza and Gil-Saura, 2006, p. 447), where efficiency has even been found to be irrelevant to value perception. However, the contribution of social values to the service-value creation is controversial and apparently contextual; it is higher in other empirical works on hospitality experiences such as community-based home stay (e.g., Jamal *et al.*, 2011), students' trips (e.g., Gallarza and Gil-Saura, 2006), or cruise services (e.g., Petrick, 2002), but weaker for luxury-hotel restaurants (e.g., Wu and Liang, 2009). Adding to this contextuality of value types, regarding the balance between intrinsic and extrinsic values, in the present study the latter seem to be more important in the value-creation process than the former (0.64 versus 0.42). The reverse has recently been shown for adventure tourism, where spiritual or psychosocial values are more important than the conventional economic and functional values (Prebensen and Xie, 2017). All these differences support the concept of value as a fully relativistic phenomenon that allows adaptation to any consumption setting where different balances in value types reflect the idiosyncrasy of each situation.

In sum, these and previous results help to bolster the construct validity of Holbrook's value conception – demonstrating its comprehensiveness (interrelated value types that show a higher-order structure), supporting its reliability and validity, and reflecting its relativism insofar as results on the prominence of different value types differ from one service-consumption setting to another.

5. Conclusions

Consensus on the multidimensionality of value represents one of the few areas of agreement in the abundant conceptual research into that topic – a key concept in services-marketing epistemology and in the strategic management of goods and services. However, though authors recognize that service value is multidimensional, there is no consensus on the number of types or the criteria for classifying and assessing them. In short, a gap between conceptual and empirical knowledge appears in this area.

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3 The present work has revisited the considerable relevance for service researchers of
4 typologies of value depicted by a selection of both theoretical and empirical works
5 (Table 1) and organized into three different kinds of approach – *trade-off*, *dynamic*, and
6 *experiential*. Among the latter, based on the contrast between utilitarian and hedonic
7 value in consumption experiences, the contribution by Holbrook was highlighted
8 because it represents early work in exploring the hedonic aspects of consumption
9 (Holbrook and Hirschman, 1982) and because it contributes to a broad and fruitful
10 typology of consumer value (Holbrook, 1994, 1999; Holbrook and Corfman, 1985) that
11 some authors (e.g., Smith, 1999, p. 157) consider a “paradigm” in consumer-behavior
12 research. This typology contemplates eight different types of value on the basis of a
13 three-distinction 2x2x2 matrix (extrinsic versus intrinsic, self- versus other-oriented,
14 and active versus reactive). The present study has proposed and validated a third-order
15 value model that captures the resulting eight value types (efficiency, excellence, play,
16 aesthetics, status, esteem, ethics, and escapism as an adaptation of spirituality) and has
17 provided empirical evidence in support of this three-dimensional conception of value.
18 This work has thereby contributed to bridging the gap between the conceptual relevance
19 of Holbrook’s typology and the previous diverse empirical attempts at measuring it that
20 have not, until now, considered all eight value types jointly (e.g., Mathwick *et al.*, 2001,
21 2002; Gallarza and Gil-Saura, 2006, 2008; Sánchez-Fernández *et al.*, 2009; Leroi-
22 Werelds *et al.*, 2014).

23 24 25 26 27 5.1. Main contributions

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29 By means of matching empirical results with the value literature, the present work has
30 found empirical support for many opinions from previous authors interested in service
31 value in general and in Holbrook’s framework in particular. More precisely, the paper
32 follows Smith’s vision (1999) of the contribution made by Holbrook’s framework,
33 providing evidence for the recognition of what Smith considers its five key merits. The
34 first three (value as experience, value as incorporating different types, and value types
35 as obtained simultaneously and in various degrees) correspond to the construct
36 validation. Analysis of a sample of 585 individuals staying at four- and five-star hotels
37 supports the reliability, convergent validity, and discriminant validity of the eight value
38 scales.

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40 The last two of Smith’s (1999) claims – i.e., interrelationships and a higher-order
41 structure – are pursued by the subsequent analyses of partial correlations, multiple
42 regressions, and value indices as higher-order measures. All these results support
43 Holbrook’s (1999) theoretical structure insofar as there are higher interrelations
44 between certain conceptually-related value types – that is, between status and esteem,
45 between efficiency and quality, and between ethics and escapism (though less between
46 play and aesthetics). In this sense, results show how Wagner’s (1999) comment that
47 “types of value are not mutually exclusive” (p. 149) is more true for some types of value
48 than for others.

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52 The first main contribution, reflected by the analysis of partial correlations between
53 each pair of value types, suggests that, for two of the four pairs, the types that share the
54 two key conceptual distinctions (extrinsic-versus-intrinsic and self-versus-other-
55 oriented) maintain their interrelations despite eliminating the effect of each of the other
56 six types – that is, the relationship is strongest between the two social types (status and
57 esteem) and the two hedonic types (play and aesthetics). Holbrook (1999, p. 11) himself
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3 recognizes that the distinction between active and reactive values is the most difficult to
4 capture, as the results of the present empirical work confirm and as previous empirical
5 studies have also shown (e.g., Mathwick *et al.*, 2001, p. 48; Gallarza and Gil-Saura,
6 2006, p. 443; Leroi-Werelds *et al.*, 2014, p. 433). Also, through the many analyses
7 undertaken, this study has found the closest interrelation between the two social values
8 (status and esteem), which further endorses the integrity of Holbrook's
9 conceptualization (Holbrook, 1999, p. 188; Richins, 1999, p. 86).

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12 The second main contribution of the present work relates to empirically exploring a
13 higher-order structure in a hospitality-value experience. The construction of indices as
14 second-order measures, organized according to Holbrook's 2x2x2 structure (i.e., six
15 indices – extrinsic, intrinsic, self-oriented, other-oriented, active, and reactive) provides
16 additional evidence for the three-dimensional paradigm when showing the lowest
17 simple correlations (changing into even negative partial correlations) between indices
18 that reflect key distinctions in Holbrook's classification. As a further step beyond
19 previous work on value as a higher-order measure (e.g., Lin *et al.*, 2005; Martín-Ruiz *et al.*,
20 2008; Yi and Gong, 2013), building a third-order model of consumer value is an
21 original contribution of the present paper, where the extrinsic-versus-intrinsic
22 distinction is viewed as a second-order (formative) construct, with value types as first-
23 order (reflective) measures. In this sense, the third-order model – showing unequal
24 strengths of the paths from extrinsic and intrinsic indices and from the different value
25 types to these indices – helps to clarify the complex nature of value as an overall
26 construct.
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32 In any case, the main contribution of Holbrook's conceptualization of value and
33 consequently of the present empirical work based thereupon is that it enables different
34 types of value to be viewed as occurring simultaneously in the same service experience
35 – that is, it demonstrates the “compresence” of value types (Holbrook, 1999, p. 186).
36 All this is shown in the present study through a third-order model and reinforced by the
37 clear interrelations between the more conceptually related pairs of value types.
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41 In short, the present work provides an empirical approach to Holbrook's (1999)
42 conceptual proposal that, unlike other previous studies, has the special feature of being
43 broad (by contemplating eight types of value in the same consumption experience) and
44 deep (in the number and types of analyses that include regressions, simple and partial
45 correlations, and indices as higher-order measures). In this sense, the paper has
46 addressed one caveat in undertaking value research: “The construct conceptualization
47 issue should be theory-driven and [should] precede any discussion of structural
48 relationships between constructs” (Lin *et al.*, 2005, p. 334).
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51. *5.2. Managerial implications*

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53 Brown (1999, p. 160) suggests that Holbrook's conceptualization produces a
54 “capitalised concept that is frightening to approach.” Despite this, may be criticism of
55 the too-theoretical nature of Holbrook's framework simply reflects the basic conceptual
56 and methodological difficulties with the concept of value (Boksberger and Melsen,
57 2011; Helkkula *et al.*, 2012), which have also been shown to exist *for* and *among*
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3 managers themselves (Nasution and Mavondo, 2008; Gallarza *et al.*, 2011).
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6 From a practical point of view, the present study offers relevant managerial implications
7 for marketing managers working in any service-related settings, in particular for those
8 operating in the hospitality area. First, it provides managers with a measurement
9 instrument that, when compared to those offered in previous value-based studies, is able
10 to interpret in a more comprehensive, broad, and holistic way the value(s) consumers
11 experience during the service consumption. Hence, managers can adopt it to
12 systematically assess the value(s) that their service design delivers to their target market.
13 Researchers concur that any value experience is a “judicious blending” of various
14 ingredients that “requires a variety of integrated experiences or assets” (Liang *et al.*,
15 2014, p. 190). In line with this idea, the study further underlines and stresses the fact
16 that interdependencies exist between certain values (e.g., status and esteem). This
17 suggests that marketers should adopt a holistic perspective that recognizes these
18 interdependencies when managing the service design of the offering they deliver to their
19 target market, thereby avoiding any type of marketing myopia. Contemporary
20 consumers are multitasking in their evaluations and are able cleverly to trade-off several
21 value types against the money and effort spent. That said, the equilibrium between the
22 eight value types should be unbalanced and the respective weights of each value type in
23 the overall value perception should vary, matching the service-brand positioning. For
24 example, hotels promoting green behavior ranking high on ethics should
25 “compresently” encourage other value perceptions such as the economic types (e.g.,
26 service excellence, with staff promptness and room cleanliness). And consumers
27 valuing a particular design (aesthetic value) in department stores or malls should not
28 experience any loss in efficiency (due, for example, to an inconvenient spatial layout).
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34 The study found that extrinsic value influences consumers’ perceived value more than
35 does intrinsic value (Figure 3), with extrinsic value being shaped mainly by efficiency
36 (e.g., tangible aspects of service) and service quality (e.g., interaction with staff) while
37 intrinsic value is mostly generated by escapism (e.g., activities that allow guests to
38 experience feelings of relaxation) and aesthetics (e.g., the servicescape). This
39 prominence of extrinsic values suggests, first, that managers should maintain high
40 standards in all aspects that contribute to perceptions of efficiency – for example, such
41 aspects of efficiency as lighting, soundproofing, and cleanliness of the room. Second, as
42 service quality is also relevant, they should plan and implement training programs
43 aimed at guaranteeing a continuous improvement in the way employees interact with
44 guests so as to satisfy their needs in a timely and emphatic manner. Third, turning to
45 aspects of intrinsic value, marketing managers also should offer guests activities that
46 allow them to experience feelings of relaxation (e.g., SPA treatments) and should
47 provide a pleasant servicescape (e.g., via furniture with attractive aesthetics or ambient
48 colors that offer a soothing atmosphere).
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52 Beyond its applicability in the service setting studied here (i.e., hotels), the present
53 paper proposes a measurement instrument that, with modifications, can be revised and
54 applied effectively by marketers in any other service sector. Of course each sector has
55 its own idiosyncrasies. For example, while spiritual value was replaced with escapism
56 in the case of the hospitality sector, this spiritual value type would need to be reinserted
57 in the survey instrument when investigating religious services or when studying other
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3 specific niche segments of the tourism market (e.g., artistic exhibits, transformative
4 tourism, and so forth). In other words, the scales used here are context-dependent so that
5 an effort must be made by academicians and practitioners to determine whether they
6 need to be adapted, at least partially, to suit the specifics of different settings.
7 Recognition of this point leads to a consideration of the study's limitations.
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10 11 5.3. Limitations

12 As with any research, some limitations in the present study must be recognized. From
13 the theoretical standpoint, there is the authors' own discretion in the selection of the
14 works included in Table 1; this results from the impossibility of encompassing all
15 previous research on value typologies in one review.
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18 From the practical standpoint, limitations in some cases reflect the circumstantiality of
19 the empirical approach and in others entail the difficulty of operationalizing Holbrook's
20 framework.
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23 First, the use of a non-probabilistic purposive sample may diminish the generalizability
24 of psychometric findings. Further, as results regarding stronger relationships are not
25 always consistent across all pairs of values, this aspect of generalizability may also be
26 questioned.
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29 Second, the study's contribution focuses on the value of case-specific indices in contrast
30 to more generic measures and on seeking to cover the broad richness of Holbrook's
31 scheme in the analysis of a single experience. Obviously, this case-specific focus limits
32 generalization of the present measures to other kinds of services. For example, the case-
33 related hotel experience meant that spirituality had to be reconceived as escapism.
34 Although the word "escapism" also appears in other studies of value such as those by
35 Mathwick *et al.* (2001), Wu and Liang (2009), and Sullivan *et al.* (2012), the case-
36 specific nature of the research must be acknowledged as a limitation.
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40 A third limitation of the present work is that it does not include the research tradition of
41 considering value as a trade-off. Holbrook himself acknowledges that he has "only
42 implicitly" left space for conceptions of value as the ratio or difference between benefits
43 and costs (Holbrook, 1999, p. 187) but maintains that this trade-off appears where it
44 belongs – namely, in the type of economic value referred to as *efficiency* (as the other
45 seven types of value do not require a consideration of negative inputs).
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49 50 5.4. Future conceptual and methodological orientations of service-value research

51 From such beginnings, the present work invites future debates on conceptual and
52 methodological issues. Among the former – as the concept of value has different
53 meanings among consumers (Holbrook, 1999), practitioners (Nasution and Mavondo,
54 2008), and researchers themselves (Gallarza *et al.*, 2011) – the review has concentrated
55 on the B2C literature and does contemplate the few attempts to operationalize customer-
56 perceived value in the B2B marketing context. Such B2B-related aspects of value
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3 should be considered in further applications, as well as the role played by employees in
4 the value-creation process and therefore in determining the value types derived by
5 consumers in their interaction with staff members (Sørensen and Jensen, 2015). The
6 inclusion of trade-offs or negative aspects should also be incorporated in analyses
7 comparable to those undertaken in the present work (viewing efficiency as involving
8 money, time, or other sacrifices).
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11 Among the methodological issues, first, there is a need to distinguish formative from
12 reflective indicators to operationalize the types and indices of value (reflective for the
13 value types but formative for higher-order constructs, as in the present work). In this
14 sense, further replications and cross-validation analyses should help to obtain a more
15 parsimonious multidimensional value scale. But the opportunity to include a different
16 format for the intrinsic self-oriented scales must also be considered – e.g., semantic
17 differential scales, which are better suited to capturing the relevant hedonic aspects. As
18 Oliver (1999, p. 47) suggests, the study has assumed a “common scale,” which is not
19 the best option for hedonic consumption.
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24 Second, there are methods alternative to those used in this study that could add to the
25 validation of interrelationships between Holbrook’s eight value types. For example, a
26 cluster and/or latent class analysis could provide evidence on which combinations of
27 value are experienced simultaneously for various customer groups and could thereby
28 add support to both the multidimensionality and the higher subjectivity of value
29 measures, Holbrook’s or others, while further investigating the “inter-subjective nature
30 of value in the experience” (Helkkula *et al.*, 2012, p. 61).
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34 Third, as the researchers’ job is about making fully comprehensible and actionable the
35 aforementioned “compresence” of value types – for hospitality managers in particular
36 and, at least partially, for any service-value creation – future adaptations and replications
37 of this higher-order structure in different service settings are encouraged. These further
38 methodological excursions could include cross-sectional work, where the validity of the
39 eight value types could be reinforced. In this sense, to fully capture the relativistic
40 character of Holbrook’s (1999) conceptualization, future work could explore
41 comparative results both intrapersonally (the same individual valuing different service
42 experiences) and interpersonally (for a value-based segmentation approach).
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46 Fourth, as a further step toward bridging the gap between concepts and methods in the
47 research on consumer value, the direct and indirect effects of Holbrook’s value types on
48 customer satisfaction and loyalty should be explored (for example, extrinsic value
49 related to the likelihood of repeat purchasing and intrinsic value tied to recommending
50 behavior) en route to the further understanding and measurement of service value in the
51 consumption experience.
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55 And last but not least – looking ahead from the possible overlapping in the
56 conceptualizations of some pairs of value types (most evident for status versus esteem),
57 as discussed by Wagner (1999) and Richins (1999) – further research should seek
58 measures that enable better differentiations between active and reactive value types in
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consumption, especially in light of the value co-creation process, reinterpreted through this active-reactive lens where interactions between subjects (consumers) and objects (services) may vary for different consumption settings.

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9 Research (1995); Consumer Value (edited, 1999); Playing the Changes on the Jazz
10 Metaphor: An Expanded Conceptualization of Music-, Management-, and Marketing-
11 Related Themes (2007); and Music, Movies, Meanings, and Markets:
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Figure 1. Structural model to assess the psychometric properties of the eight value scales

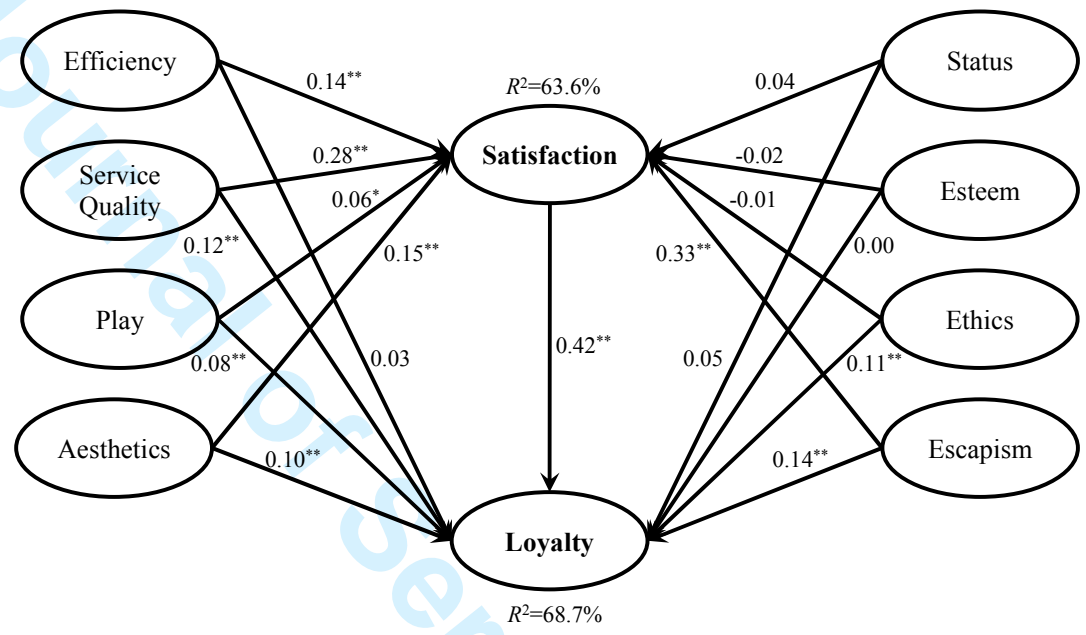


Figure 2. Structural model to build the intrinsic value index as a second-order construct

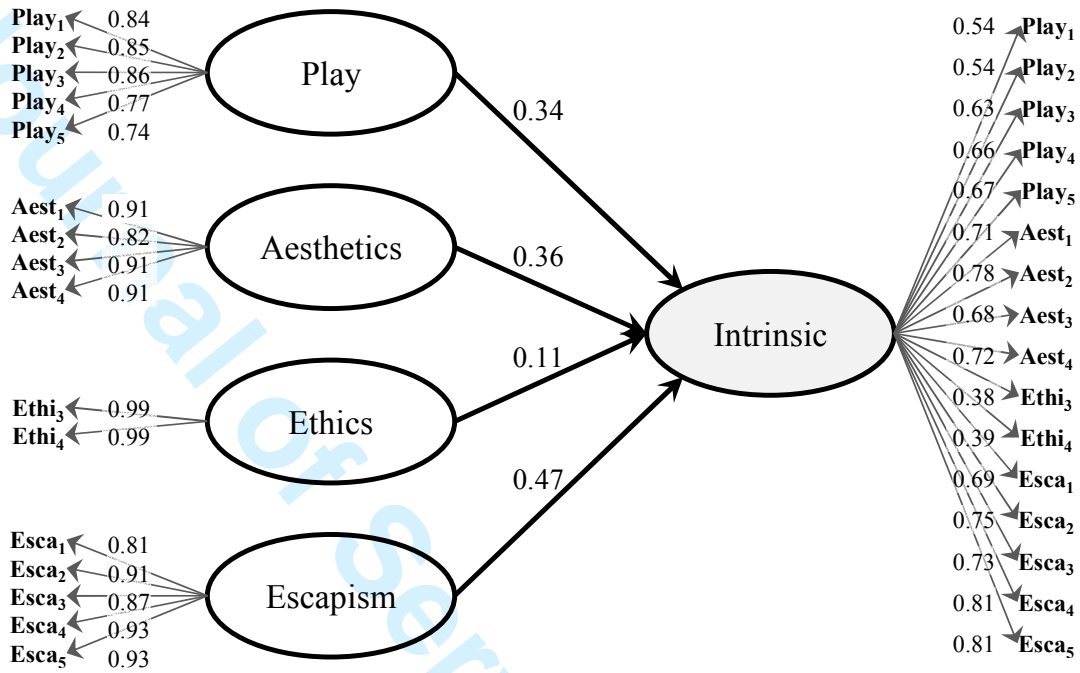
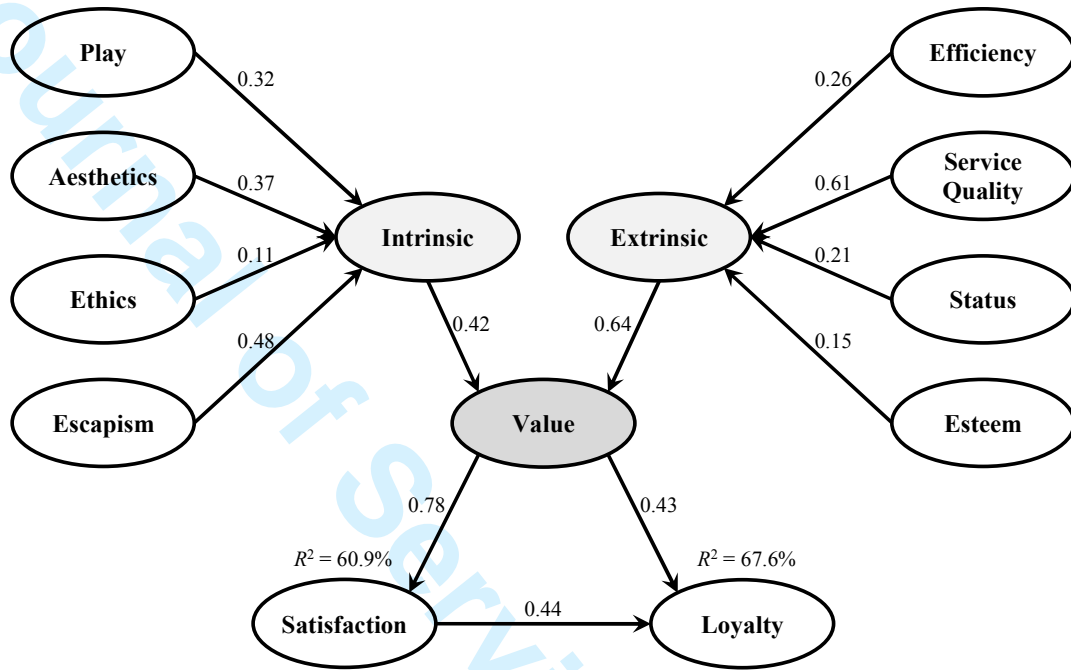


Figure 3. Structural model to build the value index as a third-order construct



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Table 1. Intra-variable value research: A review of value typologies, 1982-2017

AUTHOR(S)	SCOPE and CLASSIFICATION CRITERIA	APPROACH METHOD & CONTEXT	TYPES OF VALUE
Holbrook and Hirschman (1982)	Pioneers in understanding experiential aspects of consumption: fantasies, feelings, and fun.	EXPERIENTIAL (THEORETICAL)	Utilitarian (information-processing) Hedonic (experiential)
Holbrook and Corfman (1985)	Based on the analysis of consumption and purchase as a complete human experience.	EXPERIENTIAL (THEORETICAL)	Efficiency, Excellence, Politics, Esteem, Play, Esthetics, Morality, Religion
Monroe and Chapman (1987) and Monroe (1979)	Benefits expected from acquiring the product in relation to the necessary outlay. The origin of the value-in-use & value-in-exchange distinction.	DYNAMIC (THEORETICAL)	Acquisition value Transaction value
Zeithaml (1988)	Most accepted definition of value as a costs/benefits trade-off. Typology based on results of exploratory qualitative study on the perception of value in juice consumption.	TRADE-OFF (EMPIRICAL: Juices)	Low price Everything I want in a product Quality obtained for the price paid What is obtained for what is handed over
Sheth <i>et al.</i> (1991)	Based on the dimensionality of consumption value, it expands previous experiential approaches with epistemic and conditional value.	EXPERIENTIAL (EMPIRICAL: Cigarette smoking)	Functional Social Emotional Conditional
Dodds, Monroe, and Grewal (1991)	One of the first models on effects of value and quality on behavioral intentions. Uses a one-dimensional value-for-money scale in an experimental design.	TRADE-OFF ((EMPIRICAL: Retailing)	Value for money

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Holbrook (1994, 1999)	Conceptual proposal defining value with an axiological approach and proposing a comprehensive value typology based on a three-dimensional paradigm.	EXPERIENTIAL (THEORETICAL)	Self-Oriented	Extrinsic	Active	Efficiency	
					Reactive	Excellence	
				Intrinsic	Active	Play	
					Reactive	Aesthetics	
				Other-Oriented	Extrinsic	Active	Status
					Reactive	Esteem	
	Intrinsic	Active	Ethics				
		Reactive	Spirituality				
Babin et al. (1994)	Value scale based on two dimensions of the shopping experience.	EXPERIENTIAL (EMPIRICAL: Retailing)		Hedonic			
Lovelock (1996)	Before or after discounting costs from benefits.	DYNAMIC (THEORETICAL)		Net			
	As regards service consumption.			Gross			
Woodruff (1997)	Typology in relation to pre- and post-purchase.	DYNAMIC (THEORETICAL)		Pre-use			
				Post-use			
Oliver (1999)	The moment of making the cognitive judgment: Before or after the purchase.	DYNAMIC (THEORETICAL)		Desired			
				Received			
Sweeney et al. (1999)	Introduces perceived risk in the service quality-value for money relationship, thus expanding previous value approaches to value as a trade-off.	TRADE-OFF (EMPIRICAL: Retailing)		Perceived		Value for money	
				Experienced		Product-quality	
						Functional service quality	
						Technical service quality	
						Relative price	
				Performance/financial risk			

Cronin et al. (2000)	Comprehensive work testing four models (inter-variable approach) with Service Quality, Sacrifices, Perceived Value, Satisfaction, and Loyalty.	TRADE-OFF (EMPIRICAL: Multi-setting services)	Service Quality Sacrifices (price, time, and effort)
Parasuraman and Grewal (2000)	Literature review and emphasis on the impact of technology on the quality-value loyalty chain and on relative changes in components of value.	DYNAMIC (THEORETICAL)	Acquisition Transaction Use Redemption
Babin and Kim (2000)	One of the first models in the tourism literature with a multidimensional approach to value (four dimensions, antecedents of both hedonic and utilitarian value, affecting customer satisfaction).	EXPERIENTIAL (EMPIRICAL: Tourism)	Planning Educational Safety Fun
Sweeney and Soutar (2001)	Multidimensional scale for tangible goods (PERVAL scale) as post-purchase evaluation at the brand level in an in-store pre-purchase situation. Widely replicated later.	MIXED APPROACH (TRADE OFF and EXPERIENTIAL) (EMPIRICAL: Retailing)	Emotional Social Quality/performance Price/value for money
Mathwick et al. (2001)	Types of experiential value (Holbrook's) in relation to perceived benefits for catalog and internet shopping.	EXPERIENTIAL (EMPIRICAL: Retailing)	Playfulness (escapism and enjoyment) Aesthetics (visual appeal & entertainment) Service excellence ROI (efficiency & economic value)
Mathwick et al. (2002)	Active or reactive value dimensions the consumer experiences during the purchase of catalog and Internet shopping.	EXPERIENTIAL (EMPIRICAL: Retailing)	Active (efficiency, economic value, and enjoyment of purchase) Reactive (visual appeal, entertainment value, and service excellence)

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Baker et al. (2002)	Example of a comprehensive model examining effects of perceived merchandise value and shopping experience costs on consumers' store and patronage intentions.	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Retailing)	Interpersonal service quality Merchandise service quality Monetary price Time/effort cost Psychic cost
Petrick (2002)	Value dimensions tested in tourism, applying Sweeney & Soutar's (2001) PERVAL scale intended to be valid for a generic service experience (SERV-PERVAL).	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Tourism)	Quality Emotional response Monetary price Behavioral price Reputation
Wang et al. (2004)	Value dimensions as drivers for Customer Relationship Management in an integrative framework.	MIXED APPROACH (TRADE-OFF and RELATIONAL) (EMPIRICAL: Security firms)	Functional value Customer perceived sacrifices Social value Emotional value
Grace and O' Cass (2005)	A model integrating both emotions (consumption feelings) and cognition (perceived price) as antecedents of re-patronage intentions. Finds differences in this duality for two different retail formats (department stores and discount stores).	EXPERIENTIAL (EMPIRICAL: Retailing)	Perceived value Consumption feelings Store's service provision
Lin et al. (2005)	A comparative proposal of three models with different conceptualization specifications of value to demonstrate that value has to be specified as a formative measure.	TRADE-OFF (EMPIRICAL: e-Retailing)	Monetary sacrifice Fulfillment/reliability Customer service Web-site design Security/privacy

Sánchez et al. (2006)	Proposes a holistic conception of value in a multidimensional scale (GLOVAL) that contemplates both the value of a purchase (travel agency) and the value of a complete consumption (tourism) experience.	DYNAMIC (EMPIRICAL: Tourism)	Functional (from the agency: installations) Functional (from staff: professionalism) Functional (of package purchased: quality) Functional value price Emotional value Social value
Gallarza and Gil-Saura (2006)	Combination of the inter- and intra-variable approaches of value in an SEM model for student trips with different effects on overall perceived value, satisfaction, and loyalty.	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Tourism)	Efficiency Service Quality Social Value Play Aesthetics Time and effort spent
Ledden et al. (2007)	Measures value (singular) and values (plural) in educational services. Expanded “get” vs. “give” components. Considers value at a disaggregate level (different from a higher order construct).	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Education)	Get elements (image, functional, social, epistemic, emotional, conditional) Give elements (monetary and non-monetary sacrifices)
Diep and Sweeney (2008)	Determining the impact of product and store value on overall shopping-trip value through the interrelationship among utilitarian and hedonic components. Proposes a store-value scale as an adaptation of dimensions from Babin <i>et al.</i> (1994) and from Sweeney & Soutar (2001).	EXPERIENTIAL (EMPIRICAL: Retailing)	Store value-utilitarian Store value-hedonic Product value-performance Product value-value for money Product value-emotional Product value-social
Yuan and Wu (2008)	Uses the dimensionality of Schmitt’s (1999) experiential value, applied to restaurants.	EXPERIENTIAL (EMPIRICAL: Restaurants)	Perception of the senses (“sense”) Perception of feelings (“feel”) Cognitive perception (“think”) Emotional and functional service quality

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Nasution and Mavondo (2008)	Multidimensional value scale tested in hotels to see differences between managers and tourists. Prestige is added as asocial value to the price-quality trade-off.	TRADE-OFF (EMPIRICAL: Tourism)	Reputation for quality Value for money Prestige
Martin-Ruiz et al. (2008)	Dimensions of service value, considered as a higher-order formative construct, with benefits and sacrifices tested for multiple-contexts services (medical, dry-cleaning, auto repair, health club, fast food).	TRADE-OFF (EMPIRICAL: Multi-setting services)	Service Quality Perceived sacrifice (monetary and non-monetary) Service Equity (image or brand equity) Confidence (trust, relational value)
Sparks et al. (2008)	A customer-value model to explain the multi-dimensionality of time-share ownership.	EXPERIENTIAL (EMPIRICAL: Tourism)	Relaxation, gift-giving, status, quality, flexibility, fun, new experiences, and financial worth
Seo and Lee (2008)	Exploring dimensions of shopping values for different clothing retailers (department store, discount store, and Internet shopping mall) by enhancing Babin <i>et al.</i> 's (1994) proposal.	EXPERIENTIAL (EMPIRICAL: Retailing)	Experiential Diversional Reliable Self-expressive Efficient shopping value
Sánchez-Fernández et al. (2009)	One of the few empirical approaches using altruistic value from Holbrook's framework (ethics in vegetarian restaurants).	EXPERIENTIAL (EMPIRICAL: Restaurants)	Efficiency Quality Social Value Play Aesthetics Altruistic Value

Wu and Liang (2009)	Structural model testing effects of customer cognition of service-encounter elements on experiential value and customer satisfaction. Broader view of dimensions of experiential value (applied to restaurants).	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Restaurants)	(Restaurants) environmental factors Interaction with service employees Interaction with other customers Full price Time Efficiency Excellent service Aesthetics Escapism
Brodie et al. (2009)	Applies service branding to customer value–loyalty process in airlines. Considers a mono-item value scale, but expands the approach by considering four main antecedents of customer value.	TRADE-OFF (EMPIRICAL: Tourism)	Brand image Company image Employee trust Company trust
Lloyd et al. (2011)	An expanded scale of Customer Perceived Value (CVP) with both functional and symbolic aspects. Reflective indicators for all seven dimensions, as antecedents of an overall CVP.	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Retailing)	Product quality Service quality Perceived risk Shop environment Lifestyle Effort Price
Li et al. (2012)	Model adding customers' fashion lifestyles to classical value dimensions tested for luxury fashion brands in China.	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Retailing)	Social/Emotional value Utilitarian value Economic value

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Prebensen et al. (2013)	Model including Tourist Operant Resources (S-D logic) as dimensions of an Overall Experience Value, as a value-adding element to classical service-quality measures.	MIXED APPROACH (TRADE-OFF and DYNAMIC) (EMPIRICAL: Tourism)	Service Quality Involvement Surrounding nature Other tourists Time spent Resources spent Money spent
Yi and Gong (2013)	Development and validation of the first customer-value co-creation behavior scale (multidimensional with two higher-order factors), tested as the recall of a service-encounter experience across several service industries.	DYNAMIC (EMPIRICAL: Multi setting services)	Consumer-participation behavior (information seeking, information sharing, responsible behavior, and personal interaction) Customer-citizenship behavior (feedback, advocacy, helping, and tolerance)
Kim and Perdue (2013)	Importance of sensory attributes in hotels (e.g., room quality, overall atmosphere) alongside cognitive (e.g., price, service and food quality, national brand) and affective (e.g., comfortable feeling and entertaining) attributes	EXPERIENTIAL (EMPIRICAL: Tourism)	Cognitive attributes Affective attributes Sensory attributes
Floh et al. (2014)	Looking for effects of value types on the value-loyalty link across different segments, tested for telecommunication and financial services.	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Multi-setting services)	Functional value Economical value Emotional value Social value

Leroi-Werelds et al. (2014)	Testing of four commonly used methods for measuring customer value in “think” and “feel” products: Dodds <i>et al.</i> (1991); Gale (1994); Woodruff and Gardial (1996); and Holbrook (1999).	VARIED APPROACHES (EMPIRICAL: Multi-setting)	(For Holbrook’s) Excellence Efficiency Social value Play Aesthetic value
Beneke and Carter (2015)	Modelling antecedents and consequences of Perceived Value (for money) for private label brands.	TRADE-OFF (EMPIRICAL: Retailing)	Perceived risk Perceived relative price Perceived quality
Eid and El-Gohary (2015)	Example of a fully contextualized use of customer-value dimensions: Muslim Tourist Perceived Value (MTPV) with both traditional and religious aspects of (tourism) value.	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Tourism)	Quality Price Emotional Social Islamic physical attributes Islamic nonphysical attributes
Pandža Bajs (2015)	Structural model with positive and negative value dimensions affecting satisfaction and behavioral intention toward a tourism destination.	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Tourism)	Quality of (touristic) services Monetary costs Non-monetary costs Reputation Emotional experience (Destination) appearance
Gallarza et al. (2016)	Structural model of the effects of PERVAL dimensions of value (functional, emotional, social) on two different types of satisfaction (cognitive and affective) and on loyalty.	MIXED APPROACH (TRADE-OFF and EXPERIENTIAL) (EMPIRICAL: Retailing)	Emotional Social Quality/performance Price/value for money

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Prebensen and Xie (2017)	Logit model tested for adventure tourism where participation (physical and mental co-creation) has a positive and indirect influence on satisfaction by creating perceived value.	MIXED APPROACH (DYANIMIC and EXPERIENTIAL) (EMPIRICAL: Tourism)	Quality value Economic value Novelty value Emotional value Social value Knowledge value
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Table 2. Main characteristics of approaches to value research

APPROACH	REPRESENTATIVE SCALES	ASSOCIATED NOMENCLATURE	STRENGTHS	WEAKNESSES
TRADE-OFF	“The consumer’s overall assessment of the utility of a product based on the perceptions of what is received and what is given” (Zeithaml, 1988, p. 8).			
	Dodds <i>et al.</i> (1991)	value-for-money; get vs. give; sacrifices vs. benefits; economic value; ratio; equation; product-quality	Widely adopted; easy to operationalize; often included in means-end models.	Often unidimensional. No consensus on number and nature of costs and benefits.
DYNAMIC	“Customer value creating processes should not be viewed in the traditional ‘engineering’ sense, but as dynamic, interactive, non-linear, and often unconscious processes” (Payne <i>et al.</i> , 2008, p. 86).			
	Yi and Gong (2013) for value co-creation	Acquisition, transaction, value-in-use, value-in-exchange, co-creation	Useful for both marketing strategy and consumer behavior. Value dimensions are drivers of competitive advantages. Allows relational approach and favors an SDL perspective.	Most illustrative examples are just theoretical. Minimally address sacrifices.
EXPERIENTIAL	"I define consumer value as an interactive relativistic preference experience" (Holbrook, 1999, p. 5).			
	Babin <i>et al.</i> (1994); Mattwick <i>et al.</i> (2001)	Hedonic and utilitarian; functional and emotional, cognitive and affective; playfulness	Holistic, comprehensive. Highly subjective. Allows interpretation of many consumption phenomena (including arts, religion, ...).	Complex; Difficult to fully operationalize. Mainly cost-free.

Table 3. Development and validation process for the eight value scales

AIMS	PROCEDURE	TECNIQUE	in TEXT		REFERENCES USED
Developing and validating scales for Holbrook's 8 value types Churchill 1979; Peter and Churchill 1986; Hinkin, Tracey and Enz 1997; Netemeyer et al 2003; Bearden, Netemeyer and Haws 2011	Specify Domain of Construct	Literature Review	2.2	Table 1	Holbrook (1999) 's 2x2x2 classification
				Text	Smith (1999)'s five claims on Holbrook's typology merits
	Item Generation	Literature Search	3.2	Table 4	Cronin, Brady, and Hult (2000) Service Quality
					Nasution, Mavondo (2008); Sparks <i>et al.</i> (2008) Status, Esteem
					Wu and Liang (2009) Efficiency, Aesthetics
		Focus Group			Item generation on less common scales (Ethics)
		Consultation with Expert			Holbrook's approval of Relaxation as an adaptation of Spirituality and separation of Social values
	Purify Measure	PCA with Procrustean Rotation	4.1.1	Text	Schönemann (1966)
	Assess Reliability	Cronbach's Alpha	4.1.2	Table 5	Nunnally and Bernstein (1995)
		Composite Reliability (CR)			Wets, Linn, and Joreskog (1974)
Assess Validity	Nomological	4.1.3	Figure 1	Cronbach and Meehl (1955)	
	Discriminant			Loadings and Cross-Loadings	Barklay <i>et al.</i> (1995); Chin (1998)
			HT/MT Ratio	Henseler <i>et al.</i> (2015); Clark and Watson (1995); Kline (2011)	
	Convergent		AVEs	Fornell and Larcker (1981)	
Finding empirical support for Holbrook's 2x2x2 scheme. Smith 1999; p. 147	Assess Interrelations Among Value Types	Linear Regressions	4.2	Table 7	Draper and Smith (2014)
		VIF, $R^2_{i-Other}$			
		Single and Partial Correlations		Table 8	Spirtes <i>et al.</i> (1993)
	Value As a Higher-Order Construct (construction of 6 indices and a 3rd-order model)	HCA or Repeated Indicators Approach	4.3	Figure 2	Wold (1982); Lohmöller (1989)
		PLS Path Modeling		Table 9	
		Correlation Between Indices		Table 10 and 11	Spirtes <i>et al.</i> (1993)
	Simple and Partial Correlations				

		3rd-Order Model SEM (with PLS); Reflective and Formative Constructs		Figure 3	Lin <i>et al.</i> (2005); Martín-Ruiz <i>et al.</i> (2008); Lloyd <i>et al.</i> (2011); Yi and Gong (2003)
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Table 4. Constructs, items, and sources used for scale construction

Efficiency		
1	The room lighting is appropriate	Adaptation from Wu and Liang (2009) on environmental factors
2	The room temperature is comfortable	
3	The hotel environment is clean	
4	The room is correctly soundproof	
5	The space and equipment in the bathroom are convenient	Focus group's results
6	The toiletries offered in the bathroom are useful	
7	The hotel offers suitable additional services for guests when needed (parking, concierge, ...)	
8	The location of the hotel is easy to reach	
Service Quality (Excellence)		
1	Generally, the employees provide service reliably, consistently, and dependably	Cronin <i>et al.</i> (2000)
2	Generally, the employees are willing and able to provide service in a timely manner	
3	Generally, the employees are competent (i.e., knowledgeable and skillful)	
4	Generally, the employees are approachable and easy to contact	
5	Generally, the employees are courteous, polite, and respectful	
6	Generally, the employees listen to me and speak in a language that I can understand	
7	Generally, the employees are trustworthy, believable, and honest	
8	Generally, the employees make the effort to understand my needs	
9	Generally, the physical facilities and employees are neat and clean	
Play		
1	The hotel offers plenty of children's activities	Adaptation from Sparks <i>et al.</i> (2008)'s Fun scale
2	The hotel offers plenty of family activities	
3	The possible activities organized by hotel/staff are great fun	Focus groups results
4	This hotel offers added services to make my stay more pleasurable (SPA, swimming pool, ...)	
5	This hotel offers added services to make my stay more comfortable (WiFi, newspapers, ...)	
Aesthetics		
1	The furnishing of the hotel is aesthetically appealing	Adaptation from Wu and Liang (2009) on aesthetics (items 1 and 2) and environmental factors (items 3 and 4)
2	The atmosphere of the hotel is wonderful	
3	The colors of walls and floor are complementary and coordinating	
4	The hotel architecture is impressive	
5	The smells at my stay have been pleasant (at breakfast or other meals, in the hall, ...)	Consultation with expert
6	The views from the windows are impressive	
Status		
1	Staying in this hotel is considered prestigious	Nasution and Mavondo (2008)'s prestige scale
2	I consider staying in this hotel a status symbol	
3	I consider staying in this hotel fits my social status	Sparks <i>et al.</i> (2008), Status scale
4	Staying at this hotel gives a good impression to other people	

Esteem

- | | |
|---|---|
| 1 Staying at this hotel increases my sense of self-worth | |
| 2 I get a great sense of achievement from staying at this hotel | Adaptation of Sparks <i>et al.</i> (2008), Status scale |
| 3 I get a sense of pride when staying at this hotel | |
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Ethics

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|---|--------------|
| 1 The hotel is friendly to the environment (laundry, cleaning bathroom, ...) | |
| 2 The hotel collaborates in a social project (NGOs or similar) | Focus Groups |
| 3 Prices in the hotel are transparent (services not included correctly announced, ...) | |
| 4. At this hotel everything is run in a legal and proper way | |
| 5. This hotel follows all applicable rules and regulations | |
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Escapism

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|---|---|
| 1 This hotel allow me to escape from my worldly cares | Focus groups |
| 2 The hotel helps me escape from my work related activities | |
| 3 This hotel helps me to experience a state of total relaxation | Adaptation from Sparks <i>et al.</i> (2008), Relaxation scale |
| 4 This hotel gives me the opportunity to unwind while I am on holiday | |
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Table 5. Psychometric properties of the eight scales

	alpha	CR	AVE		Effi	SQua	Play	Aest	Stat	Este	Ethi	Esca
Effi	0.83	0.88	0.50	Effi	0.71	0.61	0.54	0.60	0.69	0.42	0.20	0.53
SQua	0.97	0.97	0.79	SQua	0.56	0.89	0.39	0.57	0.52	0.36	0.32	0.63
Play	0.87	0.90	0.65	Play	0.50	0.38	0.80	0.58	0.51	0.36	0.14	0.47
Aest	0.91	0.94	0.78	Aest	0.53	0.54	0.55	0.89	0.66	0.48	0.22	0.57
Stat	0.88	0.92	0.73	Stat	0.59	0.48	0.49	0.59	0.86	0.75	0.20	0.54
Este	0.93	0.95	0.87	Este	0.36	0.34	0.35	0.44	0.68	0.93	0.27	0.44
Ethi	0.98	0.99	0.98	Ethi	0.18	0.32	0.12	0.21	0.18	0.26	0.99	0.36
Esca	0.93	0.95	0.79	Esca	0.48	0.60	0.46	0.54	0.49	0.41	0.35	0.89

Bold figures in diagonal are the square roots of the AVE.

Simple correlations between pairs of constructs in the lower triangle.

Heterotrait-Monotrait (HT/MT) ratios in the upper triangle.

Table 6. Item to scale correlations. Loadings (in bold) and cross loadings

	Effi	SQua	Play	Aest	Stat	Este	Ethi	Esca
Effi1	0.62	0.38	0.23	0.31	0.38	0.26	0.12	0.29
Effi2	0.70	0.32	0.33	0.32	0.37	0.23	0.10	0.27
Effi3	0.76	0.46	0.34	0.36	0.41	0.20	0.15	0.37
Effi4	0.66	0.30	0.40	0.36	0.42	0.33	0.12	0.25
Effi5	0.74	0.41	0.36	0.45	0.47	0.29	0.12	0.41
Effi6	0.75	0.40	0.38	0.42	0.46	0.30	0.15	0.35
Effi7	0.71	0.46	0.44	0.42	0.41	0.22	0.14	0.38
SQua1	0.49	0.91	0.33	0.47	0.41	0.27	0.27	0.53
SQua2	0.49	0.91	0.37	0.49	0.44	0.31	0.29	0.56
SQua3	0.48	0.91	0.33	0.48	0.39	0.31	0.29	0.55
SQua4	0.50	0.92	0.32	0.49	0.43	0.30	0.30	0.55
SQua5	0.49	0.91	0.32	0.49	0.41	0.30	0.31	0.56
SQua6	0.45	0.72	0.35	0.42	0.44	0.31	0.21	0.42
SQua7	0.47	0.90	0.33	0.48	0.46	0.31	0.27	0.53
SQua8	0.53	0.93	0.37	0.51	0.43	0.33	0.31	0.59
SQua9	0.54	0.88	0.35	0.49	0.42	0.30	0.27	0.54
Play1	0.27	0.24	0.80	0.34	0.23	0.21	0.09	0.25
Play2	0.25	0.22	0.80	0.34	0.23	0.19	0.12	0.23
Play3	0.34	0.32	0.83	0.42	0.29	0.25	0.17	0.35
Play4	0.49	0.30	0.81	0.48	0.50	0.31	0.10	0.45
Play5	0.53	0.39	0.79	0.54	0.56	0.39	0.04	0.46
Aest1	0.43	0.44	0.47	0.90	0.52	0.39	0.19	0.43
Aest2	0.52	0.57	0.54	0.83	0.48	0.39	0.24	0.59
Aest3	0.43	0.41	0.42	0.91	0.54	0.40	0.17	0.42
Aest4	0.48	0.47	0.50	0.90	0.56	0.39	0.13	0.44
Stat1	0.54	0.40	0.49	0.58	0.90	0.63	0.14	0.41
Stat2	0.51	0.36	0.43	0.54	0.88	0.68	0.13	0.39
Stat3	0.40	0.41	0.30	0.41	0.76	0.44	0.20	0.42
Stat4	0.55	0.46	0.45	0.48	0.87	0.57	0.16	0.44
Este1	0.39	0.32	0.37	0.44	0.68	0.92	0.23	0.42
Este2	0.29	0.30	0.30	0.41	0.60	0.95	0.24	0.35
Este3	0.32	0.33	0.31	0.38	0.60	0.93	0.25	0.37
Ethi4	0.18	0.32	0.13	0.21	0.18	0.24	0.99	0.33
Ethi5	0.17	0.31	0.12	0.21	0.19	0.27	0.99	0.36
Esca1	0.42	0.48	0.36	0.46	0.46	0.41	0.23	0.80
Esca2	0.39	0.52	0.37	0.47	0.44	0.35	0.30	0.90
Esca3	0.36	0.47	0.40	0.45	0.35	0.29	0.26	0.87
Esca4	0.48	0.61	0.44	0.52	0.47	0.39	0.37	0.93
Esca5	0.45	0.59	0.45	0.51	0.44	0.37	0.36	0.93

Table 7. Standardised coefficients for estimating each construct from all the others, variance of each construct explained by all the other constructs (R^2), and associated *VIF*

	Effi	SQua	Play	Aest	Stat	Este	Ethi	Esca		<i>VIF</i>	$R^2_{i-Other}$
Effi		0.27	0.19	0.09	0.36	-0.10	0.00	0.04	Effi	1.95	48.8%
SQua	0.27		-0.05	0.20	0.07	-0.04	0.11	0.34	SQua	1.98	49.5%
Play	0.22	-0.06		0.30	0.12	0.02	-0.05	0.18	Play	1.65	39.5%
Aest	0.08	0.19	0.24		0.23	0.05	0.00	0.14	Aest	2.07	51.6%
Stat	0.26	0.05	0.07	0.17		0.47	-0.06	0.04	Stat	2.74	63.5%
Este	-0.10	-0.04	0.02	0.05	0.65		0.13	0.08	Este	1.95	48.8%
Ethi	0.00	0.18	-0.07	0.00	-0.13	0.21		0.25	Ethi	1.20	16.6%
Esca	0.04	0.34	0.15	0.15	0.05	0.08	0.15		Esca	1.96	48.9%

For each construct (a row) the bold figure is the effect of its complementary construct.

Table 8. Simple (r_{ij}) and partial ($r_{ij:k}$) correlations for pairs of value types, blocking the effects of each other value type

	X_i	X_j	r_{ij}	$r_{ij:k}$: partial correlation blocking for each other value type							
				Effi	SQua	Play	Aest	Stat	Este	Ethi	Esca
Economic	Efficiency	S. Quality	0.56			0.46	0.37	0.39	0.49	0.53	0.38
Hedonic	Play	Aesthetics	0.55	0.39	0.44			0.37	0.47	0.54	0.40
Social	Status	Esteem	0.68	0.62	0.62	0.62	0.58			0.66	0.60
Altruistic	Ethics	Escapism	0.35	0.30	0.21	0.33	0.28	0.30	0.28		

The first column lists the names attributed by Holbrook to the more parsimonious 2x2 classification, omitting the active vs. reactive dimension.

Table 9. Estimated coefficients in the models used to build the six indices

	Intrinsic	Extrinsic	Self-Oriented	Other-Oriented	Active	Reactive
Play	0.344		0.184		0.369	
Aesthetics	0.358		0.214			0.206
Ethics	0.108			0.129	0.081	
Escapism	0.474			0.488		0.288
Efficiency		0.258	0.246		0.456	
Service Quality		0.613	0.585			0.594
Status		0.210		0.362	0.361	
Esteem		0.147		0.304		0.127

Each column represents a value index with its four implied first-order constructs in rows.

Table 10. Correlation matrix for the six value indices

	Intrinsic	Extrinsic	Self- Oriented Oriented	Other- Oriented	Active	Reactive
Intrinsic	1.00	0.75	0.84	0.84	0.81	0.86
Extrinsic	0.75	1.00	0.95	0.81	0.84	0.94
Self Oriented	0.84	0.95	1.00	0.73	0.84	0.94
Other Oriented	0.84	0.81	0.73	1.00	0.79	0.83
Active	0.81	0.84	0.84	0.79	1.00	0.72
Reactive	0.86	0.94	0.94	0.83	0.72	1.00

Correlations between pairs of antagonist indices are in bold face.

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Table 11. Simple correlations (r_{ij}) between pairs of complementary indices and partial correlations ($r_{ij.k}$) when blocking for the effect of any other index

$r_{ij.k}$: partial correlation blocking for each other index

X_i	X_j	r_{ij}	Intr.	Extr.	Self-Oriented	Other-Oriented	Active	React.
Extrinsic	Intrinsic	0.75			-0.30	0.21	0.22	-0.29
Self-Oriented	Other-Oriented	0.73	0.09	-0.26			0.20	-0.30
Active	Reactive	0.72	0.10	-0.30	-0.38	0.20		