Journal of Business Economics and Management
ISSN 1611-1699 / eISSN 2029-4433
2020 Volume 21 Issue 3: 679–705
https://doi.org/10.3846/jbem.2020.11851

TARGETING SMART SHOPPERS: A CROSS-COUNTRY MODEL

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Received 21 February 2019; accepted 14 November 2019

Abstract. The purpose of this article is to provide a robust and consistent cross-country measurement of the smart-shopper self-concept. Drawing on existing single-country studies, our work extends research by validating a pioneer cross-country scale that measures the smart-shopping mechanism in a holistic manner. Survey data were collected from 1,233 shoppers from six different Western countries. Cross-country equivalence was assessed using multigroup confirmatory factor analysis using configural, metric, and factor variance invariance tests. The results indicate that the smart-shopper self-concept is a second-order construct comprising two dimensions: smart-shopper-attributed behavior and smart-shopper feelings. Our findings also reveal that consumers in the different countries exhibit different degrees of smart-shopper self-concept and differ in their perceptions of the affective and behavioral responses generated during a smart purchase process. Marketing practitioners looking to target smart shoppers across multiple countries could build on the findings of this study to develop effective international segmentation and positioning strategies.

Keywords: smart shopping, smart shopper, cross-country, measurement invariance, scale development, self-concept, feeling, behavior.

JEL Classification: M30, M31, M16, F23.

Introduction

Academic studies associate smart shopping with consumers who make effective use of their buying capability, which leads to economic utility while generating a positive internal reward for the shopper (Mano & Elliott, 1997; Schindler, 1989).

The earliest empirical research on smart shopping appeared in the late 1990s. However, since the global economic crisis of 2008, this concept has become increasingly interesting to industry and the media (Atkins & Hyun, 2016), where the term "smart shopper" frequently describes shoppers who seek the thrill of deal hunting.

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Smart shoppers engage in certain behaviors designed to maximize shopping value and minimize the investment of time, money, and effort (Atkins et al., 2016). They are not prone to making impulsive purchases. They make shopping lists, compare products, browse sales advertisements and make rational brand choices. (Atkins et al., 2016; Burton et al., 1998); however, smart shoppers do not solely focus on the economic benefits provided by a well-planned shopping trip. Obtaining a good deal generates a hedonic reward that often translates into a feeling of joy and pride in their shopping competence (Garretson et al., 2002; Schindler, 1998). The emotions arising from shopping experiences leave affective memory traces that consumers process to form postpurchase satisfaction (Cachero-Martínez & Vázquez-Casielles, 2017a). For smart shoppers, the positive affective response generated by a good purchase has been found to affect brand attitude, (Liu & Wang, 2008; Manzur et al., 2011), retail store preference (Labbé-Pinlon et al., 2011), promotion evaluation (Chandon et al., 2000; de Pechpeyrou, 2013), and word-of-mouth communication (Chung & Darke, 2006).

Previous research focused on smart-shopping conceptualization can be divided into two broad categories: (1) studies focused on shoppers' behavioral traits (i.e., Atkins & Hyun, 2016; Atkins & Kim, 2012; Atkins et al., 2016; Labbé-Pinlon et al., 2011; Mano & Elliott, 1997) and (2) research works focused on consumers' emotional response motivated by a smart purchase (i.e., Bicen & Madhavaram, 2013; de Pechpeyrou, 2013; Schindler, 1998). No prior study has considered or measured both components of the smart shopper in an integrated manner. In addition, this study is one of the first to perform a cross-country validation of the proposed model. Since the majority of members of a society share a common set of beliefs that impact their behavior (Çelikkol et al., 2019), their purchase decision process is likely to be influenced by the norms and values of their cultural group. However, to our knowledge, only two prior studies related to smart shopping have been conducted with an international sample: Chung and Darke (2006) examined the impact of smart-shopper motives on word-of-mouth communication in Canada and Singapore, while Chandon et al. (2000) compared the impact of smart-shopper feelings on the evaluation of promotion by individuals from France and the United States of America. In both cases, the researchers developed the scale in one country and subsequently applied it in another.

The purpose of this article is to provide a robust and consistent cross-country measurement of smart-shopper self-concept. Two key research questions guide this study: 1) What are the behavioral and affective characteristics that define consumers who perceive their purchases as smart? 2) Does the consumer's country of origin lead to different valuations of these two dimensions?

To investigate the answers to these questions, this work has the following aims: first, to expand the literature by proposing a scale that measures both smart shoppers' behaviors and feelings. Second, to test a final measurement model that advances the theoretical development of smart shopping, validating the proposed scale in a consistent manner across countries. Third, to show whether and how the smart shopper profile is different in the six countries studied (Spain, Germany, France, the United Kingdom, Italy and the USA). Fourth, to provide relevant information to practitioners who target this consumer segment across multiple countries.

This study begins with a comprehensive literature review. Following a systematic examination of previous research regarding the topic, we propose a conceptual measurement model. The methodology section first describes the data collection and analysis strategies and then reports and analyzes the key findings. Following the discussion, we provide managerial information that could be relevant to practitioners targeting smart shoppers in an international context. Finally, the conclusion section presents the limitations of this study and suggests avenues for further research.

1. Theoretical framework

This section is structured as follows. First, a conceptualization of a smart shopper is provided. Then, measurement scales developed by previous research are examined, and finally, we propose an alternative theoretical model that captures the bidimensional nature of the smart-shopper self-concept.

1.1. Conceptualization of the smart shopper

We conducted a comprehensive survey of published academic research regarding smart shopping with the goal of describing the state of this research area. This literature review reveals that the term "smart shopping" is generally associated with the smart shopper purchasing process (Labbé-Pinlon et al., 2011) but is rarely defined in an explicit manner. From a behavioral perspective, the prior research describes smart shoppers as people who make shopping lists, monitor and organize out-of-store and in-store promotional information (Mano & Elliott, 1997), have a clear concept of their needs and wait for products to go on sale before making purchases (Atkins & Kim, 2012). Consequently, smart shoppers find top-quality goods at discounted prices (Baltas, 1997; Labbé-Pinlon et al., 2011; Mano & Elliott, 1997). Like market mavens, smart shoppers willingly seek, own and share general information about products and markets.

Mano and Elliott (1997) defined smart shopping as the tendency to search for and utilize promotional information to achieve price savings. They associated the concept with consumer purchasing practices that involve the effective use of the individual's buying skills and ultimately lead to enhanced economic utility. Atkins and Kim (2012, p. 361) offered a more comprehensive definition when they identified smart shopping as the process followed by "consumers seeking to minimize the expenditure of time, money, or energy to gain hedonic and utilitarian value from the [shopping] experience".

Unlike price-conscious consumers, who focus exclusively on paying low prices (Batra & Sinha, 2000; Lichtenstein et al., 1993), smart shoppers do not solely seek economic benefits from shopping. Instead, they seek to obtain a more hedonic reward, which is "more subjective than its utilitarian counterpart" (Babin et al., 1994, p. 646). Researchers have identified various hedonic outputs from shopping, such as delight, fun, perceived freedom and fantasy fulfilment (Vieira et al., 2018; Babin et al., 1994). Numerous studies have shown that price shopping may be pleasurable for a variety of nonutilitarian reasons (Alba & Williams, 2013), including entertainment (Ailawadi et al., 2001), market maven self-image enhancement (Fe-

ick & Price, 1987; Ailawadi et al., 2001; Chelminski & Coulter, 2007; Litterio et al., 2017) or bargain hunting (Chandon et al., 2000; Jin & Sternquist, 2004). Baltas (1997) argues that the promise of obtaining good quality at a reasonable price leads to a "smart buy" feeling that may motivate some shoppers.

Smart shoppers engage in promotional activities and acquire items for emotional reasons associated with self-concept enhancement (Chandon et al., 2000). Schindler (1989) provided the first definition for the intrinsic positive reward derived from a good purchase, a concept that distinctly identifies smart shoppers. He defines smart-shopper feelings as "the ego-related affect, which may be generated in a consumer by a price" (Schindler, 1989, p. 448). Later, Garretson et al. (2002) used the term "smart-shopper self-perception" to identify a psychological construct pertaining to consumers' positive feelings caused by price savings. This affective response is greater when the consumer feels a strong attribution of responsibility for obtaining better prices (Schindler, 1989).

1.2. Smart shopper measurement: attributed behaviors and feelings

As summarized in Table 1, the scales used to date focus either on the behavioral traits attributed to smart shoppers or on the internal reward that a smart purchase generates in consumers (smart-shopper feelings). However, no prior scale encompasses both components of the smart shopper.

Table 1. Smart shopper scales

	Author	Scale Dimensions and Items	Reliability	Convergent and discriminant validity tested
Smart-Shopper Behavior	Atkins and Hyun (2016)	21 item Likert-type scale developed by the authors. 5 dimensions.	Alpha > 0.70	Yes
	Atkins et al. (2016)	34 item Likert-type scale developed by the authors. 5 dimensions.	Alpha > 0.75	Yes
	Atkins and Kim (2012)	15 item Likert-type scale developed by the authors. 3 dimensions.	Alpha > 0.70	Yes
	Labbé-Pinlon et al. (2011)	3 item Likert-type scale from Lombart and Belvaux (2004). Single dimension.	Lombart and Belvaux (2004)	Lombart and Belvaux (2004)
	Odou et al. (2007)	Qualitative.	Qualitative	Qualitative
	Mano and Elliott (1997)	7 item Likert-type scale developed by the authors. Single dimension.	Alpha = 0.91	Yes
Smart-Shopper Feeling	Mittal (2016)	2 item Likert-type scale based on Chandon et al. (2000). Single dimension.	Not mentioned	Not mentioned
	Bicen and Madhavaram (2013)	Indirect scale (measured through happiness scale from Honea and Dahl (2005). 2 item Likert-type scale. Single dimension.	Alpha values ranging from 0.70 to 0.98	Yes

End of Table 1

	Author	Scale Dimensions and Items	Reliability	Convergent and discriminant validity tested
Smart-Shopper Feeling	de Pechpeyrou (2013)	3 item Likert-type scale based on Chandon et al. (2000). Single dimension.	Validated	Yes
	Manzur et al. (2011)	2 item Likert-type scale adapted from Garretson et al. (2002). Single dimension.	Alpha = 0.91	Yes
	Liu and Wang (2008)	3 item Likert-type scale based on Burton et al. (1998). Single dimension.	Alpha = 0.84	Yes
	Chung and Darke (2006)	Smart shopping motives scale. 2 item Likert-type scale. Single dimension.	Not mentioned	Not mentioned
	Darke and Dahl (2003)	Indirect scale (through the effect of purchase attributions on satisfaction) 6-point Likert-type scale. Single dimension.	Not mentioned	Not mentioned
	Garretson et al. (2002)	2 item Likert-type scale adapted from Burton et al. (1998). Single dimension.	Alpha = 0.94	Yes
	Chandon et al. (2000)	Value expression benefit scale. 3 item Likert-type scale. Single dimension.	Validated	Yes
	Schindler (1998)	Indirect scale (measured through a price satisfaction scale).8 item Likert-type scale. Single dimension.	Alpha = 0.92	Not mentioned
	Burton et al. (1998)	4 item Likert-type scale developed by the authors. Single dimension.	Alpha = 0.94	Not mentioned

Previous research shows a lack of agreement regarding the number of dimensions of the behavior attributed to customers who make smart purchases. Two empirical studies proposed and validated a single-dimension phenomenon (Labbé-Pinlon et al., 2011; Mano & Elliott, 1997). However, Atkins and Hyun (2016), Atkins et al. (2016) and Atkins and Kim (2012) proposed a scale of the smart shopper experience that comprised multiple dimensions: information organization and correct purchase, economic savings and time/effort savings. This scale fulfils convergent, discriminant and nomological validity.

Regarding smart-shopper feelings, there is agreement on the unidimensional nature of this construct. Nevertheless, the scales used to measure this concept have different origins and varied compositions. Only three studies developed their own scales (Schindler, 1998; Burton et al., 1998; Chandon et al., 2000); the rest either adapted one of these three scales or used scales from various published studies. For example, studies in the store-brand area (e.g., Garretson et al., 2002; Liu & Wang, 2008; Manzur et al., 2011) adapted the four-item *smart-shopper self-perception scale* initially proposed and tested by Burton et al. (1998), which fulfils all the reliability and validity requirements. Chandon et al. (2000) generated a three-

item *value expression benefit scale* that was later reused by de Pechpeyrou (2013). Although they have different names, the scales by Burton et al. (1998) and Chandon et al. (2000) are semantically similar. Both allude to the intrinsic reward shoppers experience after making what they consider to be a good deal: pride in their shopping ability and a sense of having acted intelligently and feeling good about oneself. Finally, the empirical study by Schindler (1998) measured the positive response generated by a price discount through a price satisfaction scale.

Only two prior studies related to smart shoppers have worked with an international sample. In their study about the effectiveness of sales promotion, Chandon et al. (2000) compared the impact of smart-shopper feelings on the evaluation of promotions using a small student sample from France and the United States of America. Chung and Darke (2006) identified differences in word-of-mouth (WOM) communication when comparing Canadian and Singaporean shoppers and suggested that culture may affect smart shopper motivation to give WOM. None of these studies performed a cross-national validation of the measurement models proposed. Instead, the researchers developed the scale in one country and then applied it in another. Moreover, in both studies, smart-shopper feeling is a secondary objective of the research; therefore, the comparative results shed limited light on the topic in a cross-country context.

As we discuss next, given the recognition that previous researchers have identified and measured traits that maintain a basic underlying presence in smart shopping, there is a need to develop a comprehensive cross-country measure that encompasses the behavioral and affective attributes of smart shoppers and validate the scale in a consistent manner across countries.

1.3. Research questions and conceptual proposal

The smart-shopper purchase experience is a multifaceted process followed by consumers whose purchase behavior is characterized by minimizing their investments of time, money, and effort (Atkins et al., 2016) while optimizing value, which in turn generates a positive internal reward (Garretson et al., 2002). While prior studies have focused on either smart-shopper behavior or smart-shopper feelings, we suggest that to advance the theoretical development of this concept, any new measure of smart-shopper self-concept needs an integrative approach. Focusing solely on behavior or feelings may be a too narrow approach to capture the complexity of the smart-shopping experience. Therefore, we propose to develop and test a new, encompassing yet parsimonious scale that captures this duality across countries.

Specifically, the research questions that guide our work are the following: (1) Are smart-shopper feelings and smart- shopper attributed behavior two distinct dimensions of smart-shopper self-concept? (2) What are the items that best represent the behavioral and affective characteristics of smart shoppers? (3) Is the smart-shopper self-concept expressed to different degrees across nations? (4) Does the consumer's country of origin lead to different valuations of the smart-shopper feelings and behavioral response?

The conceptual framework we propose suggests that smart-shopper-attributed behavior is a first-order construct that describes the aspects of conduct that shoppers attribute to

a purchase experience leading to a smart buy. This variable reflects on the three distinct dimensions formulated by Atkins and Kim (2012): right purchase, effort/time savings and money savings. We also theorize that the affective response motivated by a wise purchase (smart-shopper feelings) is a first-order construct that is reflected in the items proposed by the works of Burton et al. (1998), Chandon et al. (2000), Garretson et al. (2002), Manzur et al. (2011), and de Pechpeyrou (2013). Finally, we suggest that the smart-shopper self-concept is a second-order construct that reflects on smart-shopper-attributed behavior and smart-shopper feelings. The smart-shopper self-concept construct in this study is framed upon the notion that many purchases are driven by a mix of utilitarian and hedonic motives (Alba & Williams, 2013).

2. Methodology

Based upon the academic literature review and a qualitative inquiry, we created candidate scale items to conceptualize smart-shopper attributed behaviors and feelings. A pilot test conducted for scale refinement and purification purposes was followed by a main study to validate the scale.

2.1. In-depth interviews to generate items

Prior to scale generation, a qualitative study was performed to obtain consumers' perceptions of the nature of the smart-shopping mechanism. The main goal of this qualitative inquiry was to comprehend what smart shopping means to buyers, what types of conduct lead to smart purchases and whether the participants considered themselves smart shoppers. A total of 16 in-depth interviews were conducted in cities with similar characteristics in the USA (Chicago) and Spain (Madrid). The following stratification variables were used to select the sample: gender, age and education.

Participants referred to aspects of smart shopping that could be separated into purchase behavior traits (i.e., seeking and organizing information, planning for purchases, saving money and time and obtaining the highest quality at the best possible price) and postpurchase affective benefits (i.e., feelings of happiness, excitement, increased self-esteem, wisdom and emotional reward). See Table A1 in the Appendix.

In accordance with the literature review, the qualitative study verified that smart shopping was perceived to be an organized and planned process that leads to a careful choice of brands that offer the best quality-price ratio. Smart shopping was also associated with acquiring only the goods that the shopper needs in contrast with impulse purchases made during a nonsmart shopping process.

Participants were asked whether they perceived themselves as smart shoppers. In the USA, all but one interviewee considered themselves to be smart shoppers, whereas in Spain, only two people did. The other six Spanish shoppers recognized that although they made smart purchases from time to time, they preferred to attribute smart shopping behavior to another person, such as the traditional homemaker. These results reveal the existence of different smart-shopper self-concepts between interviewees in Spain and the USA. Thus, we anticipated that cultural factors could affect smart shoppers' self-perceptions.

2.2. Pilot study: item purification

The qualitative analyses produced an extensive list of beliefs attributed to smart-shopper behavior and feelings. Thirty-five candidate scale items were generated to reflect the dimensions of smart-shopper self-concept. To establish content validity, the items were evaluated for conformity to the theoretical definitions and redundancy. After screening the items both independently and jointly with marketing and language experts to avoid confusion and misjudgment, 25 items were retained for initial psychometric assessment: 24 of these assessed both smart-shopper feeling and attributed behavior and the last item assessed the smart-shopper self-concept (Table A2 in Appendix). Scale items not representative of the domain or that were unclear were removed.

We conducted a pilot test as an initial quantitative procedure for initial scale refinement, scale purification and content validity assessments. A total of 180 master's degree and undergraduate students participated in the pilot study. Given that no previous research has jointly measured smart-shopper attributed behavior and feeling using a single scale, we performed an exploratory estimation to identify how the observed variables related to the underlying factors. Principal component analysis (PCA) with oblimin rotation served to examine factor patterns and relationships between items. We chose oblimin instead of orthogonal rotation because it allows for between-factor correlations (Hair et al., 2006), which was expected in the analyzed phenomenon. After examination of the factor loadings, 15 items were retained. To illustrate the PCA results, Table A2 in the Appendix shows the original 24 items; the 9 items in italics were eliminated. This appendix details all the factor loadings, explained variance, and the reasons why eliminated items were not included in the final questionnaire. Reliability was also checked for the pilot sample. Items related to time/effort savings exhibited a Cronbach's alpha of less than 0.70, suggesting problems for future estimations.

2.3. Main study: data collection and instrument development

The data for the main study were drawn from a survey carried out simultaneously in six countries. We selected the most-developed countries on two continents, North America and Europe, in terms of their gross domestic product (GDP). According to Eurostat (2017), the top five European Union countries in terms of GDP are Germany (21.3%), the United Kingdom (15.2%), France (14.9%), Italy (11.2%) and Spain (7.6%); together, these countries account for 70% of the EU GDP. Although all the selected countries are Western, they differ in terms of their degree of masculinity/femininity, long-term orientation, power distance, individualism, uncertainty avoidance, and indulgence (The Hofstede Center, 2017). We focused on the two Hofstede dimensions that have received the most empirical attention: individualism-collectivism and power distance (Taras et al., 2010). In individualistic cultures (e.g., USA (91), UK (89), Italy (76)), people are more person-centric and appreciate uniqueness. In contrast, in collectivistic societies (e.g., Spain (51)), individuals are more integrated into groups, and role obligations shape attitudes (Hofstede, 2001). People in low power distance cultures (e.g., USA (40), Germany (35), UK (35)) tend to believe that events are more influenced through their own decisions, while individuals in cultures of higher power distance

(e.g., France (68)) are less predisposed to act on their personal preferences and tend to be more concerned with the opinions of others (Hofstede, 2001).

These differences provide a stringent test of the generalizability of the conceptual model (Broderick, 2007). Moreover, the retail structures differ between Europe and the USA. Therefore, the cultural, economic and market conditions of the countries adopted for this study were considered sufficiently different to represent a wide range of developed nations.

Semantic differences were resolved using a translation/back-translation method. In addition, all the questionnaires were reviewed by a professional editing service. Data were collected using a Qualtrics panel in the six countries. This market research company maintains proprietary respondent panels. The researchers shared the entire process of designing the sample (preconditions for survey participation), ensuring the subsample sizes, replacing sample units if needed, and initial depuration.

A total of 1,272 shoppers participated in the final survey through a self-administered online questionnaire. All individuals were 18 years of age or older and responsible for the purchase of consumer-packaged goods within their respective households. After the depuration process, the final sample size for the application of the statistical procedure in this article was 1,233. Of these participants, 234 were from Spain (Mage = 46.1, SD = 13.8; 42.1% female), 205 were from Germany (Mage = 36.1, SD = 9.8; 27% female), 206 were from France (Mage = 32.4, SD = 9.26; 40.6% female), 189 were from the UK (Mage = 36.1, SD = 11.14; 53.2% female), 202 were from Italy (Mage = 36.2, SD = 9.7; 49.2% female) and 197 were from the United States (Mage = 40.1, SD = 12.3; 58.2% female). Other demographics by country can be provided to readers upon request.

Regarding the data analysis methodology, descriptive measures (mean, standard deviation), Analyses of Variance (ANOVA), Tamhane test, principal component analyses (PCA) with oblimin rotation, first-order and second-order confirmatory factor analyses (CFA), and multigroup analyses (MGCFA) were applied using SPSS and AMOS 22.0 statistical packages. Readers who may not be familiar with these statistical procedures will find a comprehensive description of the application of these techniques in the next section, including the pertinent bibliographical references.

2.4. Data analysis procedure

For the global model, descriptive analyses, means and standard deviation for all the initial items were obtained. Then a test of normality was performed, and the existing correlations between the variables were revised. Next, the homogeneity of the standard deviations of the variables was checked. Afterwards, we carried out the following steps:

Common method variance (CMV) was examined by making a previous estimation with the data using Harman's single-factor test (Podsakoff et al., 2003). This was made through a PCA with oblimin rotation for the initial items.

A series of PCA to set the number of dimensions and items were run. As lengthy scales may be more difficult to use and closely related items may result in redundancy (Ruvio et al., 2008), we excluded the items with commonalities below 0.6.

Using the resulting configuration, we applied several successive CFA operations to set the number of dimensions for smart-shopper attributed behavior using maximum likelihood

estimation. As the theory and the partial measurement scales suggested (Jarvis et al., 2003), the dimensions were considered reflective constructs, making the items manifestations of the unobserved variable. Initially, we compared two models: one with three sub-dimensions based on Atkins and Kim (2012) and a second unidimensional model based on Mano and Elliott (1997). We chose the model with the best goodness-of-fit.

Next, we examined smart-shopper attributed behavior and smart-shopper feelings jointly to determine whether these two constructs were two distinct dimensions of smart shopping. To check again the CMV for the measurement model, we connected each indicator to a single construct in a confirmatory factor analysis rather than using two separate constructs for behavior and feeling.

We used three different methods to analyze discriminant validity. The first one was the one suggested by Fornell and Larcker (1981). This procedure consists in comparing the inter-square correlation with the AVE. If the second one is lower than the first one, the discriminant validity property is fulfilled. We also used a second procedure suggested by Anderson and Gerbin (1988) that consists in comparing the chi-square difference tests for the dimensions in pairs, to determine whether the freely estimated model (correlation estimated freely) provides a better fit to the data than does the restricted model (correlation fixed to 1). If the estimation of the restricted model yields worse results than the free model, we can conclude that there is not a lack of discriminant validity. The third procedure used to test the discriminant validity was to estimate the Heterotrait Monotrait (HTMT) ratio developed by Henseler et al. (2015). According to the authors, if this ratio exceeds a threshold of 0.85, the relationships within the same constructs are stronger than those of the indicators measuring different constructs.

Then, we estimated a final second-order model and checked the rest of the psychometric properties (composite reliability, alpha and AVE). Following the terminology of Jarvis et al. (2003), the final model represented a Type I second-order model with first-order latent constructs with reflective indicators.

Regarding the cross-country analyses, previous studies on the smart-shopping process used an emic approach, as researchers developed the scale in one country and subsequently applied it in another. As suggested by Yoo and Donthu (2001), we developed a cross-country analysis following an etic approach. To assess measurement invariance, we first estimated six individual CFA models. Then, we assessed the invariant measurement of smart-shopper behaviors and feelings across countries by applying a first-order multigroup CFA (first-order MGCFA). As a third step, we assessed the invariance of parameters, and latent means were considered through second-order multigroup CFA (second-order MGCFA). After establishing scalar invariance, latent factor means testing was conducted via MGCFA with mean structures. Following Byrne (2010), a country was taken as a reference, and its means for the three smart-shopping constructs (behavior, feeling and self-concept) were fixed to 0, imposing the equality of means restriction on the remaining countries. We repeated this process for every country to obtain the differences in the latent means of each construct. Finally, to explore country differences more deeply, we conducted multiple comparisons based on Tamhane's test. These non-parametric tests allowed the assessment of which countries' mean values were actually different.

3. Analysis and results

3.1. Descriptive statistics and overall CFA model

As indicated in Table 2, the means and standard deviations for all the items were above 4 on the 7-point scale. The test of normality, the revision of the existing correlations between the variables and the check for homogeneity of the standard deviations checkout showed that the variables fulfil the requirements for modeling.

Table 2. Descriptive measures

	Item	Description	Mean	Standard Deviation
Behavior: Organization & Right Purchase	SBORP1	They have a clear idea of their wants and needs	5.12	1.80
	SBORP2	They buy only what they need	4.80	1.70
	SBORP3	They gather as much information as possible before going on shopping trips	5.04	1.76
	SBORP4	They use shopping lists	4.97	1.84
	SBORP5	They adjust to their budget	5.08	1.75
Behavior: Economic Savings	SBES1	They obtain a good deal on the purchase	5.06	1.73
	SBES2	They compare brand alternatives at different prices	4.96	1.72
	SBES3	They find top-quality merchandise at reduced prices	5.07	1.71
	SBES4	They keep abreast of store sales	5.16	1.73
Behavior: Time & Effort Savings	SBETS1	They look for convenient purchases	4.70	1.70
	SBETS2	They trust word-of-mouth recommendations	4.38	1.70
	SBETS3	They consider good service from the store	4.61	1.68
Smart-Shopper Feeling	SSF1	I get a real sense of joy when I make a wise purchase	5.05	1.77
	SSF2	Making smart purchases makes me feel good about myself	5.01	1.79
	SSF3	I take pride in making smart purchases	4.99	1.76
Self-concept	Smart	The degree to which I consider myself a smart shopper	5.17	1.22

Note: Likert scale ranging from 1 (totally disagree) to 7 (totally agree).

A PCA with oblimin rotation for the 15 initial items revealed a two-factor structure, indicating that no general factor was observed. A separate PCA to set the number of dimensions and items for smart-shopper-attributed behavior (Table 3) revealed a one-factor structure rather than the three-factor structure suggested by Atkins and Kim (2012). After excluding the three items with lower communality, the final loads that appeared in the final configuration matrix (9 items) allowed the initial identification of a unidimensional structure for the latent variable smart-shopper-attributed behavior.

Table 3. Principal component analyses for smart behavior

Item	Description	Configuration Matrix
SBORP3	They gather as much information as possible before going on shopping trips	0.804
SBORP1	They have a clear idea of their wants and needs	0.791
SBORP5	They adjust to their budget	0.753
SBES2	They compare brand alternatives at different prices	0.744
SBES1	They get a good deal on the purchase	0.797
SBES4	They keep abreast of store sales	0.768
SBETS1	They look for convenient purchases	0.597
SBETS3	They consider good service from the store	0.611
SBETS2	They trust word-of-mouth recommendations	0.550

Using this initial configuration, we applied successive CFA models to assess the final dimensions for smart-shopper behavior. The goodness-of-fit indexes were better for the unidimensional model based on Mano and Elliot (1997) (χ^2/DF = 1.79; p<0.034; CFI = 0.998; TLI = 0.994; RMSA = 0.025) than for the three-dimensional model based on Atkins and Kim (2012) (χ^2/DF = 3.86; p < 0.001; CFI = 0.986; TLI = 0.977; RMSA = 0.048). Therefore, the unidimensional model was chosen.

When discriminant validity was checked for this configuration following the strictest procedure (comparison of inter-square correlations with AVE), the results (Table 4) show that the squared inter-construct correlation between "organization & right purchase" (SSORP) and "economic savings" (SBES) is very high (0.857). When comparing this value with the AVE obtained for each construct (0.621 for SSORP and 0.517 for SBES), we concluded that the three-dimensional model lacks discriminant validity. Moreover, there is no discriminant validity for "effort/time savings" (SBETS) and "economic savings" (SBES).

Table 4. Discriminant validity check for smart-shopper attributed behavior (three-dimensional model)

	SSORP	SBETS	SBES
SSORP	0.621		
SBETS	0.497	0.402	
SBES	0.857	0.529	0.517

Note: Based on Fornell and Larcker (1981).

In summary, the three-dimensional model presented worse adjustments and lacked discriminant validity compared with the unidimensional model. Given that the more complex model improved neither the goodness-of-fit nor the psychometric properties of the scale, we chose the one-dimensional smart-shopper behavior model for the subsequent estimations. As previously stated, there is agreement in the literature regarding the unidimensional nature of smart-shopper feelings (Burton et al., 1998; Schindler, 1998; Chandon et al., 2000; Garretson et al., 2002; Liu & Wang, 2008; Manzur et al., 2011).

The next step was to examine smart-shopper attributed behavior and smart-shopper feelings jointly to determine whether these two constructs are two distinct dimensions of smart shopping. To do so, we run a confirmatory factor analysis for a single construct joining feelings and behaviors. This estimation led to a significant decrease in the model's fit. This result, together with the first check with Harman's test, showed that CMV did not appear to be a significant problem in the present study. Moreover, the comparison of the goodness-of-fit values of the two-dimensional and one-dimensional models indicated that the unidimensional model did not present additional advantages over the two-dimensional model (index values can be provided upon request). Thus, the bidimensional structure of smart-shopper self-concept was established (behavioral and affective).

The scale fulfilled all the psychometric requirements for validity and reliability. Following the same procedure as before, the square inter-construct correlation was 0.716, which was higher than the AVEs for behavior (0.583) and feeling (0.594). These results suggest a potential lack of discriminant validity in the measurement model. Therefore, we also checked the discriminant validity with the other two procedures described in the methodology section. First, we compared the chi-square difference tests for the two dimensions in pairs. The estimation of the restricted model offered a worse estimation than did the free model (non-significant χ^2 with p = 0.034 and normed chi-square = 1.323). Moreover, the correlations among all the variables did not include the unit value. In our case, the HTMT was 0.952, indicating high discriminant validity for this model.

To sum up, although there was a higher correlation of the model with two dimensions, we did not appreciate a severe lack of discriminant validity. This higher correlation between constructs reveals the possible existence of a higher-order construct, which is reflected in the dimensions of smart-shopper attributed behavior and smart-shopper feelings. An indicator that measured the degree to which individuals consider themselves smart shoppers when they make a purchase decision captured this second-order construct called smart-shopper self-concept.

The comparison of the goodness-of-fit indicators determined which model was better (the second-order model vs. the first-order model). Both presented non-significant p-values for χ^2. However, although the alternative model was less parsimonious, it produced a significantly better estimation ($\Delta\chi^2 = -33.6$; Δ df = 1). This result led us to accept the proposed alternative model.

Table 5 shows the standardized coefficients of the final second-order model as well as the psychometric properties (composite reliability, alpha and AVE) of the bi-dimensional CFA model. It is a second-order model with first-order latent constructs (smart-shopper attributed behavior (SB) and smart-shopper feeling (SF)) with reflective indicators. These first-order constructs were indicators of an underlying second-order construct (SMART). The measures of goodness-of-fit indicated very high model accuracy (χ^2/DF = 1.07; p = 0.37; CFI = 0.99; TLI = 0.99; RMSA = 0.008).

Each indicator and all the relationships between constructs were significant. In this second-order model (Figure 1), the smart-shopper self-concept was reflected in the indicator that measured the degree to which consumers considered themselves smart shoppers (λ = 0.646). The smart-shopper self-concept was also reflected in two dimensions: smart-shopper

attributed behavior (λ = 0.857) and smart-shopper feelings (λ = 0.978). Smart-shopper feelings are reflected in items that represent emotions shoppers experience when making smart purchases: *feeling good about oneself* (λ = 0.799), *pride in their shopping ability* (λ = 0.760) and *joy* (λ = 0.733). Smart-shopper behavior was reflected in indicators such as information seeking and organization (putting *effort into gathering commercial information* (λ = 0.764)), making the right purchase (a *clear idea of needs* (λ = 0.804)), money savings (obtaining *good deals* (λ = 0.732) and *keeping abreast of sales* (λ = 0.752)).

Table 5. Smart shopping second-order model

Construct/ Item	Construct	Description	Estimate	C.R.	P	Comp.	AVE	Alpha
SBORP3	BEHAVIOR	They gather as much information as possible before going on shopping trips	0.764	23.789	***	0.848	0.583	0.856
SBORP1	BEHAVIOR	They have a clear idea of their wants and needs	0.804	23.156	***			
SBES1	BEHAVIOR	They get a good deal on the purchase	0.732					
SBES4	BEHAVIOR	They keep abreast of store sales	0.752	23.845	***			
SSF3	FEELING	I take pride in making smart purchases	0.760	26.374	***	0.854	0.594	0.856
SSF2	FEELING	Making smart purchases makes me feel good about myself	0.799	23.806	***			
SSF1	FEELING	I get a real sense of joy when I make a wise purchase	0.733					
DEGREE_1	SMART	The degree to which I consider myself a smart shopper	0.646	13.273	***			
BEHAVIOR	SMART		0.857					
FEELING	SMART		0.978	13.833	***			
Goodness-of-fit indexes: χ^2/df = 1.074 (p = 0.377); CFI = 0.999; TLI = 0.999; RMSA = 0.008								

Note: Significance level: *** p < 0.001.

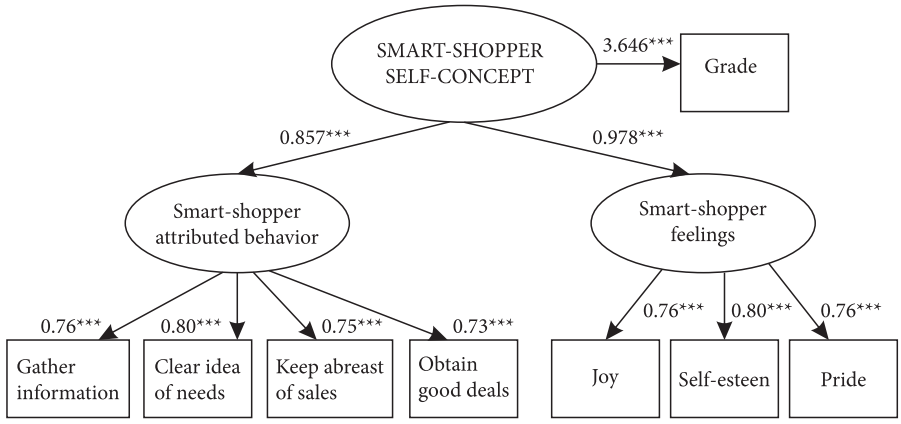

Figure 1. Smart shopping second-order global model estimation

3.2. Cross-country analyses: MGCFA models

Table 6 presents the descriptive measures for each country and the factor loadings when estimating CFA for every country. The normed χ^2 values for the six models were all lower than the suggested cutoff of 2.0 (Tabachnick & Fidell, 2007). Convergent validity was evident for each construct across the six countries because all the factor loadings were significant ($p < 0.001$) and ≥0.60. Regarding the other psychometric properties, the AVE values were satisfactory (≥0.50), and all composite reliability values ≥0.60 (the smallest was 0.754).

Table 7 demonstrates configural invariance (Model 1), metric invariance (Model 2) and scalar invariance (Model 3).

Table 8 shows the results of the comparison between the second-order metric invariant model (Model 4) and the model that additionally included a cross-group constraint on the variance (Model 5: variance invariance). The results indicated that the second-order MGCFA was considered invariant between the groups of countries ($\Delta\chi^2 = -5.672$; p = 0.842; ΔCFI = –0.001; ΔTLI = –0.008; ΔRMSA = 0.001).

After establishing scalar invariance, latent factor means testing was conducted via MGCFA with mean structures. Following Byrne (2010), a country was taken as a reference, and its means for the three smart-shopping constructs (behavior, feeling and self-concept) were fixed to 0, imposing the equality of means restriction on the remaining countries. We repeated this process for every country to obtain the differences in the latent means of each construct. Table A3 of the Appendix shows all these latent mean differences. The results indicate that most of the differences in latent means between pairs of countries were significant, except for the following pairs of countries: Spain-UK and UK-Italy.

Tamhane's test results are presented in Table 9. The findings showed the greatest heterogeneity in mean values for the subsamples from France, Germany and the USA.

Table 6. Descriptive statistics, factor loadings and ANOVA for the six countries

	Spain			Germany			France			UK			Italy			USA			F
Item	Mean	SD	Load	Mean	SD	Load	Mean	SD	Load	Mean	SD	Load	Mean	SD	Load	Mean	SD	Load	
They gather as much information as possible	5.00	1.68	0.742	4.85	1.79	0.606	4.21	1.73	0.741	5.39	1.75	0.865	5.20	1.60	0.775	5.58	1.72	0.836	15.92***
They have a clear idea of their wants and needs	5.30	1.79	0.832	4.76	1.80	0.748	4.33	1.93	0.766	5.27	1.81	0.835	5.32	1.54	0.821	5.66	1.65	0.879	14.92***
They obtain a good deal on the purchase	5.00	1.70	0.676	4.71	1.80	0.743	4.25	1.73	0.743	5.39	1.69	0.803	5.22	1.46	0.754	5.77	1.62	0.827	20.33***
They keep abreast of store sales	5.28	1.64	0.683	4.82	1.83	0.786	4.43	1.80	0.723	5.33	1.77	0.781	5.20	1.49	0.723	5.86	1.56	0.876	16.57***
I take pride in making smart purchases	5.00	1.73	0.821	4.74	1.70	0.715	4.24	1.91	0.623	5.13	1.77	0.792	5.29	1.53	0.752	5.56	1.62	0.765	14.33***
I get a real sense of joy when I make a wise purchase	5.09	1.69	0.800	4.90	1.79	0.771	4.44	1.76	0.821	5.09	1.82	0.865	5.18	1.73	0.723	5.61	1.63	0.818	9.71***
Making smart purchases makes me feel good about myself	5.25	1.60	0.846	4.29	1.82	0.650	4.17	1.86	0.680	5.24	1.73	0.879	5.39	1.58	0.781	5.67	1.65	0.861	26.38***

Note: Significance level: *** $p < 0.001$.

Table 7. Cross-cultural measurement invariance tests

Model	χ^2	DF	P	χ^2/DF	TLI	CFI	RMSEA
Model 1 Configural Invariance	70.199	120	0.020	1.462	0.987	0.995	0.019
Model 2 Full Metric Invariance	99.676	95	0.021	1.365	0.989	0.994	0.017
Model 3 Scalar Invariance	123.994	80	0.007	1.409	0.988	0.992	0.018
Model Comparison	$\Delta\chi^2$	ΔDF	P	$\Delta\chi^2$/DF	ΔTLI	ΔCFI	ΔRMSA
Model 2– Model 1	29.477	–25	0.244	–0.097	0.002	–0.001	–0.002
Model 3– Model 2	24.318	–15	0.071	0.044	–0.001	–0.002	0.001

Table 8. Second-order MGCFA comparison of fit indexes

Model Comparison	DF	P	$\Delta\chi^2$/df	ΔTLI	ΔCFI	ΔRMSA	$\Delta\chi^2$
Metric Invariance (Model 4) vs. Scalar Invariance (Model 5)	–10	0.842	0.198	–0.008	–0.001	0.001	–5.672

Table 9. Differences between countries: multiple comparisons test

Country	Compared with…	Self-Concept Construct
Spain	Germany	0.30433*
	France	0.67971*
	UK	–0.07836
	Italy	–0.07056
	USA	–0.42834*
Germany	Spain	–0.30433*
	France	0.37538*
	UK	–0.38269*
	Italy	–0.37489*
	USA	–0.73267*
France	Spain	–0.67971*
	Germany	–0.37538*
	UK	–0.75807*
	Italy	–0.75027*
	USA	–1.10805*

End of Table 9

Country	Compared with…	Self-Concept Construct
UK	Spain	0.07836
	Germany	0.38269*
	France	0.75807*
	Italy	0.00780
	USA	–0.34998*
Italy	Spain	0.07056
	Germany	0.37489*
	France	0.75027*
	UK	–0.00780
	USA	–0.35778*
USA	Spain	0.42834*
	Germany	0.73267*
	France	1.10805*
	UK	0.34998*
	Italy	0.35778*

4. Discussion

This study describes the development of a scale that jointly measures the behavioral and affective dimensions of smart shopping across countries. The qualitative study served as an exploratory analysis that surfaced aspects of smart shopping beyond those identified through the literature review that were later contrasted through the scale generation process. The study has relevant theoretical and practical implications that benefit consumer research in several ways.

First, the measurement developed by our research should prove useful in developing and testing smart-shopping theory in an international context. Our 2-dimensional, 8-item scale shows that smart-shopper attributed behavior and smart-shopper feelings are two distinct dimensions of smart shopper self-concept. In line with the work of Schindler (1998), Garretson et al. (2002) and Manzur et al. (2011), our research confirms the unidimensional nature of the smart-shopper feelings construct. Regarding the number of dimensions of smart-shopper attributed-behavior, our results show that a three-dimensional model (Atkins et al., 2012) improved neither the goodness-of-fit nor the psychometric properties of the scale, compared to the one-dimensional smart-shopper behavior model (Mano & Elliott, 1997).

Second, our scale suggests that the smart shopper is a consumer who exhibits buying patterns characterized by searching for and organizing commercial information, acquiring products that fit their needs, searching for offers and deals, waiting for sales and obtaining discounts. Consistent with preceding research that proposes that consumers' purchase decisions are oriented by the emotional aspects of shopping as much as their utilitarian considerations (Castro-López et al., 2019; Alba & Williams, 2013), our scale suggests that a smart buy that shoppers can attribute to their shopping capability rewards their ego

through feelings of self-esteem, pride and joy. While it is beyond the scope of this article to develop specific hypotheses, value assessed by our scale is quite likely to influence evaluations of brands considered while shopping (Garretson et al., 2002; Manzur et al., 2011; Authors, 2019). Potential scale applications might contribute to the literature helping identify a segment of consumers who exhibit a smart-shopper self-concept. This segmentation issue is relevant to firms and researchers that are interested in more effectively targeting at specific consumer segments.

Third, our work extends (predominantly mono-country) research on smart shopping by providing empirical evidence to support that the smart-shopper profile exists in France, Germany, UK, Spain, Italy and the USA, although it is expressed to different degrees across nations. Buyers from the USA show the highest values for smart-shopper self-concept, while French and German shoppers have the lowest scores. Consumers from Spain, Italy and the UK appear to be quite similar regarding smart-shopper self-attribution. Given that most of the differences in latent means between pairs of countries are significant, our scale allows for valid country-to-country comparisons for all the constructs (behavior, feeling and self-concept). For example, when taking Spain as the reference country, the USA is the country for which all the constructs (behavior, feeling and self-concept) reach their highest values, whereas France presents the lowest latent means. When Germany is taken as the reference country, significant differences with the UK and Italy can also be observed. British and Italian participants have higher estimated scores for smart-shopper feeling and behavior than do the German participants. A potential explanation for Germany's lower smart-shopper self-concept values might be that German shoppers tend to expect purchases to be highly convenient and worth their money (Seitz et al., 2017); therefore, obtaining a good deal might not make them feel particularly smart. Given that the values that individuals acquire in their cultural environment have been found to significantly influence their smart-shopper self-concept (Authors, 2019), we hope this scale can facilitate consumer researchers' investigation of the influence of country of origin on smart shopping.

From a managerial perspective, our research offers several practical contributions. First, the results indicate that marketers should consider the importance of information seeking and organization to smart shoppers. Tools such as apps and wish lists that help find, organize and compare promotional information could be useful for targeting this customer segment. In-store merchandising activities and product assortment could be designed to generate a treasure hunt feeling that could translate into a positive intellectual experience (Cachero-Martínez & Vázquez-Casielles, 2017b), which in turn would enhance the smart-shopper self-concept.

Second, this study shows that smart shoppers experience joy and pride when they conclude a good purchase that they can attribute to their shopping ability. Therefore, when implementing a communication mix strategy aimed at this segment, managers could use messages and media designed to help smart shoppers feel like efficient deal hunters and anticipate the intrinsic reward associated with obtaining a discount. Given that shopping experiences which deliver hedonic value have been found to influence loyalty and word-of-mouth communication (Vieira et al., 2018; Bulut & Karabulut, 2018), smart shoppers should be offered ways and be encouraged to search and share WOM messages about brands and companies.

Third, the results suggest that despite differences among smart shoppers in various countries, there are common underlying cross-country characteristics. Our findings indicate that corporations operating in the six countries included in this study could perform transnational segmentation as well as a certain amount of communication standardization.

Conclusions

This study provides a robust and consistent cross-country measurement of the smart-shopper self-concept. The authors proposed and tested a parsimonious smart-shopping scale that jointly measures the behavioral and affective dimensions of smart shopping using a sample of 1,233 consumers from six Western countries. The study included a comprehensive literature review, in-depth interviews for initial item generation and instrument development. The scale development consisted of a pilot and a main study.

Because no previous research has analyzed and measured smart shopping in a manner that could offer evidence of conceptual and measurement equivalence across nations, our scale is a promising method for explaining smart shoppers' behaviors and feelings in a consistent and valid manner. Detailed descriptions of the scales previously used to measure smart shopping is another important contribution of this research.

This study also analyzed whether buyer nationality affects the degree to which consumers perceive themselves to be smart shoppers and the intensity of this reflection in their feelings and behaviors. The results confirm that the smart-shopper profile exists in the six countries studied, although country specific differences exist.

Future research could address the limitations of this study. To improve the generalizability of the findings, further replication could be developed, including countries with larger cultural differences than those in the six countries included in this study. The products that were the subject of this study were frequently purchased products. Researchers could also focus on product categories that require more complex buying behavior.

The effects of smart shopping on different variables that reflect postpurchase behaviors, such as WOM communication, brand commitment and loyalty, could also be an interesting future line of research. Finally, the focus of this study was to identify and measure the behavioral and effective traits that maintain a simultaneous underlying presence in smart shoppers. However, it would be advisable to study alternative models that explore the causal relationships between smart shopper behavior and feelings.

Overall, this study sheds light on the understudied smart shopper concept and offers a new reliable and valid measure for the smart-shopper self-concept that contributes to the theoretical development of this construct. This study should also improve managers' understanding of how consumers across countries behave and feel when they believe they are shopping intelligently. The suggestions for improvement highlighted above should help researchers develop new theoretically robust and managerially applicable smart-shopping theories.

Acknowledgements

This research was supported by the Spanish Ministry of Economy and Competitiveness; Research Project Reference ECO2015-69103-R. It was also conducted under the framework of the TECHNOCOM UAM research group (E-38) (Universidad Autónoma de Madrid).

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APPENDIX

Table A1. Key information gathered in the in-depth interviews

Affective Traits (Feeling/Emotions)
Smart shoppers (SS) are efficient and are responsible for obtaining a discount. SS are value conscious SS feel pride in their perceived shopping capability SS experience hedonic benefits generated by price savings.
Behavioral Traits
SS look for top-quality products at discounted prices. *SS engage in store browsing.* *SS compare products, formats and prices.* *SS are not highly prone to impulsive buying. They make shopping lists, and they make rational brand choices.* *Brand is not the most important product attribute for SS* *SS monitor out-of-store and in-store promotional information.* *SS search and organize store coupons.* *SS pay attention to sales promotions in the media.* *SS purchase what they are looking for and what fits their needs.*

Table A2. Pilot study: principal component analysis results

Construct	Original scale	Description	Item	SSF Feeling	SSB3 Effort/ Time savings	SSB2 Economic savings	SSB1 Org. & Right Purchase	Reason for exclusion
SMART-SHOPPER FEELING	Burton et al. (1998); Chandon et al. (2000); de Pechpeyrou (2013); Manzur et al. (2011)	I get a real sense of joy when I make a wise purchase	SSF1	0.862				
		When I go shopping, I take pride in making smart purchases	SSF3	0.823				
		Making smart purchases makes me feel good about myself	SSF2	0.739				
		I have a sense of achievement when they feel they have made the best buy	SSF4	0.731				Lowers reliability (alpha)
		When I shop smartly, I feel like a winner	SSF5	0.728				Lowers reliability (alpha)
SMART-SHOPPER BEHAVIOR: EFFORT/ TIME SAVINGS	Groeppel-Klein et al. (1999); Chung and Darke (2006); Atkins and Kim (2012); Bicen and Madhavaram (2013)	They look for convenient purchases	SBETS1		0.609			
		They take into account good service form the store	SBETS3		0.564			
		They trust word-of-mouth recommendations	SBETS2		0.496			
		They make the purchase quickly	SBETS4		0.393			Lowers reliability (alpha)
SMART-SHOPPER BEHAVIOR: ECONOMIC SAVINGS		They compare brand alternatives at different prices	SBES2			0.836		
		They find top-quality merchandise at reduced prices	SBES3			0.741		
		They get a good deal on the purchase	SBES1			0.678		
		They keep abreast of store sales	SBES4			0.670		
	Mano and Elliott (1997); Atkins and Kim (2012)	They always buy in more than one grocery store to spend less money	SBES5			0.583		Low commonality & loads

End of Table A2

Construct	Original scale	Description	Item	SSF Feeling	SSB3 Effort/ Time savings	SSB2 Economic savings	SSB1 Org. & Right Purchase	Reason for exclusion
		When they buy a product, they always try to maximize quality for the money they pay.	SBES6			0.550		Low commonality & loads
		They are willing to make an extra effort to get lower prices	SBES7			0.505		Low commonality & loads
		When they buy a product, they always try to maximize quality for the money they pay.	SBES8			0.461		Low commonality & loads
		They always compare prices of at least a few brands before they choose one.	SBES9			0.427		Low commonality & loads
SMART-SHOPPER BEHAVIOR: ORGANIZATION & RIGHT PURCHASE	Mano and Elliott (1997); Atkins and Kim (2012)	They buy only what they need	SBORP2				0.713	
		They gather as much information as possible before going on shopping trips	SBORP3				0.686	
		They adjust to their budget	SBORP5				0.641	
		They use shopping lists	SBORP4				0.592	
		They have a clear idea of their wants and needs	SBORP1				0.590	
		They have good memory for prices and brands	SBORP6				0.552	Low commonality & loads
		SATURATION SQUARE SUM AFTER OBLIMIN ROTATION		9.659	4.335	7.569	5.578	
		% ACCUMULATED VARIANCE EXTRACTED		44.651	49.797	54.250	58.647	

Note: The 9 items in italics were eliminated.

Table A3. Latent means structures

Constructs	Germany	France	UK	Italy	USA
SELF-CONCEPT	–0.111***	–0.361***	0.076	0.088	0.203***
BEHAVIOR	–0.298***	–0.773***	0.244	0.132	0.653***
FEELING	–0.394***	–0.682***	0.093	0.219***	0.505***

Reference: Spain. Latent means for Spain has a value = 0 as a reference value

Constructs	France	UK	Italy	USA
SELF-CONCEPT	–0.152*	0.233***	0.275***	0.327***
BEHAVIOR	–0.317*	0.688***	0.545***	1.097***
FEELING	–0.232*	0.571***	0.633***	0.966***

Reference: Germany. Latent means for Germany has a value = 0 as a reference value

Constructs	UK	Italy	USA
SELF-CONCEPT	0.385***	0.478***	0.452***
BEHAVIOR	1.071***	0.915***	1.475***
FEELING	0.900***	0.942***	1.304***

Reference: France. Latent means for France has a value = 0 as a reference value

Constructs	Italy	USA
SELF-CONCEPT	0.042	0.171***
BEHAVIOR	–0.001	0.502***
FEELING	0.202	0.486***

Reference: UK. Latent means for UK has a value = 0 as a reference value

Constructs	USA
SELF-CONCEPT	0.162***
BEHAVIOR	0.561***
FEELING	0.296***

Reference: Italy. Latent means for Italy have values = 0 as the reference value.

Note: Significance level: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$.