



# The cross-cultural scale development process: The case of brand-evoked nostalgia in Belgium and the United States



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## ABSTRACT

Scale development in a cross-cultural context is demanding and exacting. The purpose of this paper is to follow the necessary protocols to examine the emerging construct of brand nostalgia. This research contributes to the literature by developing a rigorously tested, reliable and valid scale to measure the multi-dimensional nature of brand nostalgia across two countries – Belgium and the U.S. Following the rigorous scale development procedures suggested by Churchill (1979) and Devellis (2003), emic (country and market-specific) scales are developed in Belgium and the United States through a series of iterative studies. By using items common to both emic scales, a derived etic scale is created and tested. The scale's robustness is validated via tests of invariance, dimensionality, reliability, discriminant and nomological validity. Suggestions for future research and managerial implications are provided.

## 1. Introduction

Contemporary branding activities by a host of companies demonstrate a managerial interest in nostalgia as a practical marketing tool. Such activities, employed in a wide variety of product categories, aim to take consumers back to the past. For example, Old Navy gave their brand a boost by tapping into 1980s pop culture, while Herbal Essences re-released their “Shine and Smooth” hair care collection from the 1990s. In NBC Universal's (2013) “Brand Power Index” study, which measures the 500 most talked about brands as determined by factors like social media buzz and online searches, brands evoking the past shot to the top of the Index. This suggests that brand nostalgia can be a key driver for consumer brand purchase (Braun-LaTour, LaTour, & Zinkhan, 2007; Brown, Kozinets, & Sherry, 2003). Little attention, however, has been paid to measuring the complex nature of this construct. More academic research is surely warranted to develop and validate a generalizable measure of brand nostalgia to help companies gauge and track the nuanced components of nostalgia associated with their brands.

Existing marketing research, however, has focused almost entirely on measuring consumers' nostalgic tendencies as an individual difference (e.g., Holbrook, 1993; Schindler & Holbrook, 2003) or the response to nostalgia-themed advertising stimuli (e.g., Merchant, LaTour,

Ford, & LaTour, 2013; Merchant & Rose, 2013; Muehling & Pascal, 2011). Surely it is crucial, however, to deliberate on the nostalgia that is embedded in experiences (lived or idealized) with brands, and not just to focus on a reaction to an advertising stimulus. Keeping this in mind, brand nostalgia is conceptualized here as a “*reflection of the past comprised of memories, emotions and thoughts related to the consumer's lived or idealized experiences with the brand.*” Previous measures of brand nostalgia have been only single-item or unidimensional (e.g., Kessous, Roux, & Chandon, 2015) or have been developed ad-hoc, without following the necessary rigorous scale development procedures (e.g., Reisenwitz, Iyer, & Cutler, 2004). Furthermore, virtually all previous research on nostalgia has been conducted within a single country setting with a single language, limiting any cross-cultural applicability. Despite the clear managerial and theoretical importance of brand nostalgia, current research on measuring this construct offers limited guidance.

Considering this gap, this study's contribution to the literature is through developing a rigorously tested, reliable and valid scale to measure and decouple the multi-dimensional nature of brand nostalgia across two countries – Belgium and the United States. Following scale development procedures suggested by Churchill (1979) and Devellis (2003), emic (country and market-specific) scales were developed in Belgium and the United States through several iterative studies. By

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using items common to both emic scales, a derived etic scale is created. The scale's robustness is established via tests of invariance, dimensionality, reliability, discriminant and nomological validity. The research steps are summarized in [Appendix 1](#).

## 2. Issues in cross-cultural scale development

Scale development in a cross-cultural context is a difficult process. A common practice in previous research has been to back-translate instruments developed in English in the United States into a variety of target languages and then to use these translations in foreign survey instruments without qualitatively assessing the cultural or linguistic equivalence of the construct scales involved. [Douglas and Nijssen \(2003\)](#) point out that this method risks imposing the original culture's perspective in cross-cultural research. The authors urge researchers to decenter their cross-cultural investigations, in order to avoid imposing a given culture's (typically, the U.S.'s) perspective on the research questions and results. Of particular concern is construct equivalence when the construct is socially or culturally embedded ([Chidlow, Plakoyiannaki, & Welch, 2014](#); [Douglas & Nijssen, 2003](#); [Watkins, 2010](#)). If proper cultural context is not established and the construct manifestations are not qualitatively evaluated for appropriateness in the new cultural setting, the results obtained from any survey work would be highly suspect ([Watkins, 2010](#)).

Scholars have found that a particularly problematic issue in survey execution in a cross-cultural context is the etic/emic distinction as propped by [Pike \(1967\)](#). The emic perspective is a market/culture-specific context for survey research as opposed to the etic perspective that attempts to build universal theories and constructs without the embeddedness of specific cultures ([Morris, Leung, Ames, & Lickel, 1999](#); [Watkins, 2010](#)). Researchers too-often assume that emic measures, developed in a specific language and culture, are actually etic (universal) in nature, without doing the necessary qualitative and quantitative research to ensure that there are no serious culturally-specific aspects to the constructs in question ([Douglas & Craig, 2006](#); [Douglas & Nijssen, 2003](#)).

So given these issues and challenges, how should the cross-cultural marketing researcher deal with these problems? It would seem that the logical way to address the issues would be to start from an emic framework and then move toward an etic perspective. Indeed, [Berry \(1969\)](#) suggests that such a "derived etic" approach would be a logical way to tackle this problem, by employing an emic perspective in multiple cultural settings in order to find common components of a construct that would allow a basis for subsequent cross-cultural comparison. Building upon this approach, a particularly promising suggestion by [Douglas and Craig \(2006\)](#) is to build locally modified etic models and/or composite emic models where a final model is based upon commonalities found in separate, culturally-specific emic models. In the current study, the approach originally suggested by [Smith and Schwartz \(1997\)](#) was employed, which involves the development of parallel emic models, built individually within a given culture, which then serve as the foundation for a single common etic model, which holds across cultures ([Watkins, 2010](#)). The a priori assumption is that the individual emic models would be somewhat different from each other in terms of the underlying items and factor structures, but that by identifying commonalities across emic scales, it would be possible to derive an etic model with superior explanatory power (compared to the individual emic models).

## 3. Conceptualizing brand nostalgia

Although there is clear evidence that brands may produce nostalgia ([Balmer, 2011](#); [Braun-LaTour et al., 2007](#); [Brown et al., 2003](#); [Loveland, Smeesters, & Mandel, 1995](#)), the conceptualization and definition of brand nostalgia are less obvious. [Brown et al. \(2003\)](#) suggest nostalgic brand as a product or service brand from a prior historical period,

which is usually not updated to contemporary standards of performance, functioning, or taste. Other scholars provide a very broad definition: "brands that were popular in the past (and are still popular now)" ([Loveland et al., 1995](#); p. 397). [Orth and Gal \(2012\)](#) associate nostalgic brands with nostalgic memories. Some authors define nostalgic brands by brand characteristics: everyday brands (e.g., Haribo gummy bears) that evoke past memories, traditional brands that project authenticity (such as Paul bakeries), transitional brands (like Citroën) which help maintain the consumers' identity and, lastly, trans-generational brands (such as Patek Philip) which are like heirlooms and move from one generation to another ([Kessous & Roux, 2013](#)). Lastly, [Cattaneo and Guerini \(2012\)](#) attempt to characterize nostalgic brands by leveraging nostalgic brand associations: (1) associations with any positive feelings; (2) associations with security; and (3) associations with strong distinguishing features (authenticity).

In this paper, a brand is considered as a stimulus which is likely to evoke nostalgia (i.e., [Brown et al., 2003](#); [Cattaneo & Guerini, 2012](#); [Loveland et al., 1995](#); [Orth & Gal, 2012](#)). Brand nostalgia is defined as a "reflection of the past comprised of memories, emotions and thoughts related to the consumer's lived or idealized experiences with the brand." Brand nostalgia is examined from an intra-psychic perspective as opposed to a strategic or managerial perspective. This conceptualization emphasizes the consumer's experiential state of brand nostalgia, distinct from (albeit related to) other constructs which define characteristics such as brand heritage. [Balmer \(2011\)](#) elucidates these differences by describing nostalgia as "seeking the happiness of the past," whereas corporate heritage as "going forwards with a brand's meaningful past" (p. 1383). Similarly, more recently, [Pecot and De \(2017\)](#) define brand heritage as "a set of symbols and values that reinforce the identity of the brand and express its anchoring in the past and the continuity between past, present and future that characterizes the concept of heritage" (page 9), thereby highlighting the omni-temporality of the brand. In the present study, the conceptualization of brand nostalgia is that of an experience comprising feelings and memories associated with past experiences connected with the brand. [Pecot and DeBarrier](#) further delineate the difference between these two constructs by proposing brand nostalgia as a consequence of brand heritage.

To the best of the authors' knowledge, there are three existing measures of brand nostalgia, all of which were developed ad-hoc as part of larger studies, and none of which have received extensive empirical validation. The first existing measure of brand nostalgia is [Reisenwitz et al.' \(2004\)](#) 4-item brand nostalgia scale, based on a pre-existing scale measuring the nostalgia felt toward an advertisement ([Baker & Kennedy, 1994](#)). The scale includes items like "I associate this brand/company with a happy experience, yet it makes me feel sad" and "The brand/company makes me think of an experience which I feel sad about because it is over, yet it is a happy memory." Another existing measure, not explicitly designed as a brand nostalgia scale, taps a similar construct: emotional significance ([Ball & Tasaki, 1992](#)). This 3-item unidimensional measure was designed to tap the associations of an object (i.e., a brand) with significant people and events in a person's life. This scale includes items such as: "My car reminds me of important people in my life," "My car reminds me of important things I've done or places I've been." Finally, [Kessous et al. \(2015\)](#) measure brand nostalgia by asking respondents "to what extent they perceive the brand as nostalgic" (p. 191). Although this single-item measure might be appropriate in an experimental setting, it does little to capture the diversity of emotions, memories and historical thoughts evoked by brands. In summary, while these existing measures are laudable for their goal of measuring brand nostalgia, they suffer from a number of limitations. First, the existing measures of brand nostalgia are unidimensional, unable to tap other potentially important facets of the brand nostalgia construct. Second, these measures have been developed in an ad-hoc manner as part of larger research studies, which means that they have therefore not received extensive testing to ensure their validity and reliability, which certainly limits their appeal. Third, they

have all been developed within a single country and language and therefore are not suitable for generalizing cross-culturally or for deployment in a cross-cultural context.

While very little research has explored nostalgia from a cross-cultural perspective, a recent study serves as a notable exception. Hepper et al. (2014) conducted an 18-country etic study, published in the *Psychology* journal, *Emotion*. They suggest that, while nostalgia is a pan-cultural emotion (experienced by individuals in all of the countries they studied), the dimensions, components and triggers of nostalgia may vary in each country. This study employed an etic approach, which the authors note as a limitation, stating that while “emotions are universal ... their causes and consequences are culturally shaped... A truly emic approach would thus have a greater chance of identifying new features and subtle cultural differences” in nostalgia (Hepper et al., 2014; p. 744). It is the aim of the present research to go beyond this existing work in two primary ways: 1) by examining nostalgia from a marketing perspective with a focus on brands in particular and 2) by developing and testing culturally specific (emic) measures across two countries (Belgium and the United States) toward creating a universal (etic) multi-dimensional measure of brand nostalgia and establish its validity across both markets.

#### 4. Choice of countries: U.S. and Belgium

##### *Cultural dimensions of the U.S. and Belgium*

Existing academic research has suggested points of convergence and divergence between the U.S. and Belgian cultures. Hofstede, Hofstede, and Minkov (2010) found Belgium to score higher than the U.S. on power distance (understanding and acceptance of inequality), uncertainty avoidance (feeling threatened by ambiguous or unknown situations), and long-term orientation (forward-looking approach in organizing society). Belgium and the U.S. are similar in terms of masculinity (achievement orientation), and while the U.S. was found to score higher than Belgium on individualism (importance on the individual as a separate and autonomous being apart from familial or social ties) and indulgence (willingness to realize one's desires with regard to enjoying life and having fun), both countries are relatively high on these dimensions when compared to the rest of the world. In sum, Belgium (as compared to the U.S.) appears to be more accepting of inequality, less comfortable with ambiguity, and more forward looking in its approach to organizing society. Therefore, despite the fact that the cultures utilized in the present study are modern Western cultures, there are non-trivial cultural differences between them. Despite their points of cultural divergence, examinations of brands in the U.S. and Belgium suggest that nostalgia can be an effective marketing tool in both countries. For example, in the U.S., Coca-Cola recently re-introduced Surge, a citrus-flavored soft drink that was first produced in the 1990's and Pepsi released Pepsi Throwback, a version of its product that uses a retro packaging and is sweetened with cane sugar (as it was up until the 1980's). Another example concerns Calvin Klein, who last year reissued clothing items with designs from 1994 to great success. Examples are numerous in the Belgian market, as well. Recently, Vedett (a Belgian beer brand established in 1954) revived nostalgia for the seventies through a campaign with Freddy Maertens, a retired Belgian cycling champion. Similarly, the railway company Thalys used nostalgic scents among Belgian passengers to make them remember their favorite destinations that they may have travelled to with the train company. In sum, while not providing concrete evidence of their psychological effectiveness, examination of the U.S. and Belgian markets reveal that nostalgia is an important marketing tool for brands in both countries.

#### 5. Emic scale development in Belgium

##### 5.1. Study 1: Item generation-qualitative study

The extant literature was first reviewed and a qualitative study was conducted as a first step in the research process. The objectives of the qualitative study were two-fold: (1) to enhance the understanding of brand nostalgia and to identify any dimensions not captured by the current literature and (2) to generate an exhaustive list of potential scale items. The sample comprised 22 participants (3 focus groups) aged between 20 and 40 (59% men) and 24 participants (3 focus groups) aged between 41 and 60 (33% men). Each focus group lasted approximately 90 min, was audio taped and transcribed. Nine product categories were chosen and four brands from each category were used. The categories included a mix of high, medium and low involvement goods (biscuits, beer, yogurt, motorcycles, cars, cameras, clothes, shoes, perfumes). Two of the authors created a list of brands in each product category. Each of the two authors then separately ranked the brands from being nostalgic to non-nostalgic. Subsequently, they met and discussed their rankings. The author/s were in agreement in 80% of the cases, and disagreements were sorted out through discussions. The top two nostalgic and two non-nostalgic brands were selected in each category. The list of brands in each category are presented in Appendix 2. Three product categories were discussed in each focus group. The meaning of the concept of brand nostalgia was discussed in detail and participants were shown logos of different brands, and informants were asked to describe the emotions and thoughts evoked by the brands. In-depth analysis of the transcripts, using two assessors, was completed in two stages. At first, an independent review of the transcripts was conducted by each of the assessors. Each reviewer then highlighted the transcripts to identify themes for brand nostalgia and transferred key statements to an analysis worksheet. The two assessors then discussed the themes, items, and achieved consensus.

The results of the focus groups revealed three dimensions for brand nostalgia: brand oldness (which is the perception that the brand is old and that it has existed for a long time); positive brand nostalgia (positive memories and emotions related to the consumer's autobiographical past); historical brand nostalgia (longing for a time period outside of the consumer's lived past). A total of 84 items were generated through the combined process of literature review and the results from the focus groups. Three marketing faculty members served as expert judges and rated how well each item represented its respective dimension and if there were any overlaps between the items. Only those items that were classified as representative or highly representative were retained (Zaichkowsky, 1985). In all 73-items were retained out of the full set of 84.

##### 5.2. Study 2: Item reduction and exploratory factor analysis

Data were collected from 404 respondents participating in an online consumer panel in Belgium. The sample had a mean age of 36 years, 60% were female. Logos of six brands (nostalgic and non-nostalgic) across two product categories were used for this study (candy: Fruitella/Napoleon/M & M; cars: Ford/Opel/VW). Each respondent was exposed to one of the six logos. Subsequently they had to respond to the 73-brand nostalgia items generated in Study 1. Exploratory factor analysis was run using all 73 items and the factors were rotated using Varimax rotation. Items were eliminated with: (a) factor loadings below 0.70; (b) cross-factor loadings above 0.50; (c) item-to-total correlations below 0.50; or (d) inter-item correlations below 0.30 or over 0.90 (i.e., Sharma, 2010; Spector, 1992). The factor analysis resulted in 24 items loading on three factors, which were identified as positive brand nostalgia (11 items), brand oldness (9 items), and historical brand nostalgia (4 items). The three factors were selected on the bases of scree plot and interpretability. The three factors together explained 67% of the variation in the data.

### 5.3. Study 3: Confirmatory factor analysis and dimensionality

Data were collected from 245 respondents participating in an online consumer panel in Belgium. The sample had a mean age of 47 years and half were female. Logos of eight brands (nostalgic and non-nostalgic) across four product categories were used for this study (cars - Ford/Kia; apparel - Levis/Diesel; beer-Carlsberg/Jupiler; yogurt - Danette/Vitalinea;). Each respondent was exposed to one of the eight logos. Subsequently they had to respond to items related to brand nostalgia: 24-items shortlisted in study 2 in Belgium; and the 20-item emic scale developed in the U.S. (the Belgian and U.S. scales were used simultaneously in the data collection efforts in this study). Confirmatory factor analysis (using AMOS 22) was conducted for the three-factor model (positive brand nostalgia, historical brand nostalgia and brand oldness; 24-items) developed in Study 2 in Belgium. However, the findings of the CFA model revealed high correlations between the factors positive brand nostalgia and historical brand nostalgia ( $r = 0.89$ ). Thus, these highly correlated factors were combined, resulting in a two-dimensional model. The final two dimensions were named positive brand nostalgia and brand oldness. In the next stage, items that had high modification indices were eliminated along with items that had a loading  $< 0.50$ . This yielded 21-items loading on the two factors. Model fit of the scale were  $\chi^2(188) = 492$ , CFI = 0.94, IFI = 0.94, TLI = 0.93, RMSEA = 0.08. All factor loadings were significant at  $p < 0.05$  and were above 0.50. Reliability estimates for each of the dimensions were within recommended ranges (Clark & Watson, 1995; Fornell & Larcker, 1981) - positive brand nostalgia: composite reliability (CR) = 0.97, average variance extracted (AVE) = 0.69; brand oldness: CR = 0.94, AVE = 0.71. The scale items and factor loadings are presented in Table 1. The AVE for each dimension was higher than the variance it shares with any of the other dimensions, demonstrating discriminant validity (Fornell & Larcker, 1981). Several alternative measurement models were also examined (Anderson & Gerbing, 1988). Model 1 was the base model (2 factors correlated), model 2 was a one-

**Table 1**  
Dimensions, items and standardized loadings.

#### Positive brand nostalgia

*Items common to both markets:* \_\_\_ (brand name) reminds me of happy times I spent with my family (.85<sup>k</sup>, 0.88<sup>+</sup>), \_\_\_ reminds me of pleasant times from my childhood (0.85, 0.88), \_\_\_ brings to mind positive memories that are not tied to my own past (0.75, 0.73), \_\_\_ makes me think of a time I would like to have experienced (0.61, 0.67) [item dropped from the final derived etic scale]

*Belgium specific items:* \_\_\_ reminds me of pleasant memories from my own past (0.90), \_\_\_ reminds me of pleasant memories with my family (0.86), \_\_\_ calls up positive feelings related to the past (0.86), \_\_\_ reminds me of the good times I had as a child (0.86), \_\_\_ reminds me of pleasant times experienced during my youth (0.85), I associate \_\_\_ with happy event in my life (0.85), \_\_\_ helps bring to mind pleasant memories of the past (0.85), \_\_\_ reminds me of the good old days (0.84), \_\_\_ reminds me of happy times I have experienced (0.82), \_\_\_ sends me back to a positive event in history (0.80).

*U.S. specific items:* \_\_\_ (brand name) sends me back to an important time in my life (0.90), \_\_\_ makes me think about my family (0.85), \_\_\_ makes me think about my youth (0.85), \_\_\_ makes me think of someone that I have known (0.76).

#### Brand oldness

*Items common to both markets:* \_\_\_ has existed for a long time (0.90, 0.89), \_\_\_ is a historic brand (0.75, 0.87), \_\_\_ is rooted in the past (0.68, 0.67)

*Belgium specific items:* This is an old brand (0.91), This is an outdated brand (0.85), This brand has been around for a long time (0.86), This brand has history (0.92).

*U.S. specific items:* \_\_\_ has been around since I was a child (0.85), I have known this brand for a long time (0.79), \_\_\_ is not a new brand (0.69).

#### Negative brand nostalgia

*U.S. specific items only:* \_\_\_ makes me think of an unpleasant time from my youth (0.94), \_\_\_ reminds me of an unpleasant moment of my life (0.93), \_\_\_ reminds me of unpleasant memories from my childhood (0.92), \_\_\_ makes me think of unpleasant times spent with my family (0.88), \_\_\_ makes me feel sad (0.79), \_\_\_ makes me feel negative feelings linked to the past (0.79).

Notes: figures in brackets are standardized loadings (<sup>k</sup> for Belgian sample, <sup>+</sup> for U.S. sample), *t* values for all items significant at  $p < 0.05$ .

factor model, model 3 had two uncorrelated factors, and in model 4, the correlation between positive brand nostalgia and brand oldness was set to 1. As per the fit indices and difference of chi-square tests, all the alternate models exhibited significantly worse fit than model 1, the base model. Thus, all the other models exhibited a significant denigration over the model fit when compared to the base model (see Table 2 for details).

## 6. Emic scale development in the United States

### 6.1. Study 1: Item generation - Qualitative research

Four focus groups were conducted, two with participants aged from 20 to 40 and two with participants aged from 41 to 60. The final sample was comprised of 30 participants (mean age of 40 years; 36% were men). Six categories of products were chosen (cookies, beer, shoes, clothes, cars, cameras) and four brands in each category were selected using the same protocols discussed earlier. A list of brands in each category is presented in Appendix 2. Three product categories were discussed in each group. The procedures for conducting the focus groups and analyzing the transcripts were identical to the ones utilized in Belgium. The results of the focus groups revealed four dimensions for brand nostalgia: brand oldness, positive brand nostalgia, historical brand nostalgia, and lastly, the fourth dimension captured negative memories and emotions associated with the consumer's past - negative brand nostalgia. A total of 80 items were generated through the combined process of literature review and focus groups. Two marketing faculty members served as expert judges and rated how well each item represented its respective dimension and if there were any overlaps between the items. In all 72-items were retained out of the full set of 80.

### 6.2. Study 2: Item reduction and exploratory factor analysis

Data were collected from 188 respondents participating in an online consumer panel in the U.S. The sample had a mean age of 48 years, 55% were female. Logos of six brands across three product categories were used for this study (cookies: Oreo/Famous Amos; cars: Ford/Kia; apparel: Levis/Diesel). Each respondent was exposed to one of the six logos. Subsequently they had to respond to the 72-items related to brand nostalgia generated through Study 1. Exploratory factor analysis was run using all 72-items, and the factors were rotated using Varimax rotation. The protocols for retaining items were identical to the ones used in Belgium. The factor analysis resulted in 32 items loading on four factors, which were identified as: positive brand nostalgia (12 items), negative brand nostalgia (9 items), brand oldness (9 items) and historical brand nostalgia (2 items). The four factors together explained 75% of the variance in the data.

### 6.3. Study 3: Confirmatory factor analysis and dimensionality

Data were collected from 415 respondents participating in an online consumer panel in the U.S. The sample had a mean age of 46 years, half were female. Logos of eight brands across four product categories were used for this study (cookies - Oreo/Famous Amos; cars - Ford/Kia; apparel - Levis/Diesel; beer-Budweiser/Fosters). Each respondent was exposed to one of the eight logos. Subsequently they had to respond to items related to brand nostalgia: 32 items shortlisted in study 2 in the U.S.; and the 21-item emic scale developed in Belgium (the Belgian and U.S. scales were used simultaneously in our current data collection efforts). Confirmatory factor analysis (using AMOS 22) was conducted for the four-factor model (32items) developed in study 2 in the U.S. However, the findings of the CFA model revealed high correlations between the factors historical brand nostalgia and positive brand nostalgia ( $r = 0.85$ ). Thus, the highly correlated factors were combined resulting in a three-dimensional model. The final three dimensions were named: positive brand nostalgia, negative brand nostalgia and brand



**Table 2**  
Dimensionality and alternate models.

Model	Description	$\chi^2$ (df)	CFI	IFI	TLI	RMSEA	$\Delta\chi^2/df$
Belgian scale							
Model 1	Base model - 2 factors correlated	492(188)	0.94	0.94	0.93	0.08	
Model 2	1 factor model	1794(189)	0.68	0.68	0.65	0.19	1302/1*
Model 3	2 factors - uncorrelated	524(189)	0.93	0.93	0.92	0.09	32/1*
Model 4	Correlation between positive brand nostalgia and brand oldness set to 1	500(189)	0.92	0.92	0.9	0.09	8/1*
U.S. scale							
Model 1	Base model - 3 factors correlated	481(167)	0.96	0.96	0.96	0.06	
Model 2	Two factor model: second order (positive brand nostalgia, negative brand nostalgia), and brand oldness	2751(169)	0.64	0.64	0.60	0.19	2270/2*
Model 3	1 factor model	3914(170)	0.48	0.48	0.42	0.23	3433/3*
Model 4	3 factors - uncorrelated	660(170)	0.93	0.93	0.92	0.08	179/3*
Model 5	Correlation between positive and negative brand nostalgia emotions set to 1	490(168)	0.94	0.93	0.93	0.07	9/1*
Model 6	Correlation between positive brand nostalgia and brand oldness set to 1	489(168)	0.94	0.93	0.94	0.07	8/1*
Model 7	Correlation between negative brand nostalgia and brand oldness set to 1	542(168)	0.94	0.92	0.91	0.07	61/1*

\* Significantly worse fit than base model ( $p < 0.05$ ).

oldness. In the next stage, items that had high modification indices were eliminated along with items that had a loading  $< 0.50$ . This yielded 20 items loading on the three factors. Model fit of the scale was  $\chi^2$  (167) = 481, CFI = 0.96, IFI = 0.96, TLI = 0.96, RMSEA = 0.06. Reliability estimates each of the dimensions were within recommended ranges - positive brand nostalgia: CR = 0.94, AVE = 0.67; negative brand nostalgia: CR = 0.95, AVE = 0.77; brand oldness: CR = 0.91, AVE = 0.64. The scale items and factor are presented in table 1. The AVE for each dimension was higher than the variance it shares with any of the other dimensions, demonstrating the discriminant validity. Several alternative measurement models were also examined (Anderson & Gerbing, 1988). Model 1 was the base model (3 factors correlated). Model 2 is a two-factor model, model 3 a one-factor model, model 4 had three uncorrelated factors, whereas in model 5 the correlation between positive and negative brand nostalgia was set to 1. In model 6, the correlation between positive brand nostalgia and brand oldness was set to 1, and in model 7, the correlation between negative brand nostalgia and brand oldness was set to 1. As per the fit indices and difference of chi-square tests, all the alternate models exhibited significantly worse fit than for model 1, the base model. Thus, all the other models exhibited a significant denigration over the model fit when compared to the base model (see table 2 for details).

### 7. Derived etic scale - Common items across the two markets

The CFA for the emic scales developed in the U.S. and Belgium yielded 20 items in the U.S. and 21 items in Belgium. A review of the items indicates seven items common to both countries (see Table 1). These items loaded across two common dimensions - positive brand nostalgia (four items) and brand oldness (three items). Tests for configural invariance were then run using multi-group CFA for the seven-item derived-etic scale. Configural invariance implies that the items in the measurement scales exhibit the same patterns of factor loadings across the two countries. This is established when the multigroup CFA yields a measurement model with acceptable fit and all factor loadings are large and significant, and lastly that the constructs exhibit discriminant validity (Steenkamp & Baumgartner, 1998). The derived-etic model demonstrated reasonable fit to the data ( $\chi^2$  (26) = 156.52, CFI = 0.95, IFI = 0.95, TLI = 0.91, GFI = 0.94). The loadings for the latent variables were large and statistically significant in both the countries (Belgium:0.58–0.86,  $AVE_{\text{positive brand nostalgia}} = 0.60$ ,  $AVE_{\text{brand oldness}} = 0.61$ , shared variance = 0.19; U.S.:0.69–0.91,  $AVE_{\text{positive brand nostalgia}} = 0.65$ ,  $AVE_{\text{brand oldness}} = 0.68$ , shared variance = 0.24). Further, the shared variance between the two factors was less than the average variance extracted for each factor in both the markets, hence demonstrating discriminant validity (Fornell & Larcker, 1981). These results indicate that the derived-etic scale exhibits configural invariance.

A metric invariance test for the derived etic scale was subsequently run, which tests whether the strengths of the relations between specific scale items and their respective underlying constructs are the same across markets (Bollen, 2014; Steenkamp & Baumgartner, 1998). The factor structure (i.e., item loadings to factors) was found to be statistically invariant across the two samples by comparing the constrained and unconstrained models. In the unconstrained base model the factor structure is allowed to vary across the two countries, whereas the factor structure is fully constrained to be the same in the constrained model. When the  $\chi^2$  fit difference between these models is found to be insignificant, the factor structure is deemed to be invariant across the two samples. The unconstrained model produced the following fit indices  $\chi^2$ (df) = 156.52(26), RMSEA = 0.09, CFI = 0.95, IFI = 0.95, TLI = 0.91, GFI = 0.94. The constrained model, on the other hand, had the following fit indices:  $\chi^2$ (df) = 182.00(33), RMSEA = 0.08, CFI = 0.94, IFI = 0.94, TLI = 0.92, GFI = 0.93. Thus, the fit difference was not insignificant ( $\Delta\chi^2$  (df) = 25.48(7),  $p < 0.05$ ). This means that brand nostalgia is not invariant across the two cultures (Steenkamp & Baumgartner, 1998). To identify the source of metric invariance, each factor loading was made invariant (one at a time) across the two samples, and the model was rerun with these constraints. To detect the source of the model invariance,  $\chi^2$  difference tests were conducted with the unconstrained models. The tests revealed metric invariance occurred for all the items except “\_\_\_ makes me think of a time I would like to have experienced” loading on positive brand nostalgia factor ( $\Delta\chi^2$ (df) = 15.90(1),  $p < 0.05$ ). This item was dropped, and the unconstrained model II (with 6-items) was then run: ( $\chi^2$  (df) = 82.79(16), RMSEA = 0.08, CFI = 0.97, IFI = 0.97, TLI = 0.94, GFI = 0.96). Next, all factor loadings were constrained to be invariant across the two samples. This fully constrained model II had the following fit indices:  $\chi^2$ (df) = 90.23(22), RMSEA = 0.07, CFI = 0.97, IFI = 0.97, TLI = 0.95, GFI = 0.96. Thus, the fit difference was no longer statistically significant ( $\Delta\chi^2$ (df) = 7.47(6),  $p > 0.05$ ), exhibiting metric invariance for the six-item derived-etic scale across the American and Belgian samples (Steenkamp & Baumgartner, 1998). Therefore, partial measurement invariance was achieved for the six-item derived-etic scale (Byrne, 2006). Multigroup analyses revealed that there was no difference in the item loadings between men and women, however there was a difference in loadings for two items related to brand oldness (I have known this brand for a long time; \_\_\_ is not a new brand) with higher loadings for older respondents.

### 8. Nomological network

The brand nostalgia scale was tested in a nomological network of theoretically-related antecedents and consequences. The results are discussed below.

## 8.1. Antecedents

### 8.1.1. Entity theory orientation

Implicit theories (entity and incremental) guide people as they process information from their social surroundings (Levy, Stroessner, & Dweck, 1998). Entity theory orientation is a belief that personal traits are fixed and do not change (Dweck, 2000). In the realm of branding, Yorkston, Nunes, and Matta (2010) found that consumers holding an entity theory orientation are less welcoming of brand extensions because they perceive brand traits to be non-malleable. Since entity-theory orientation implies an expectation that brands should remain the same (e.g., not change), it is argued here that the higher consumers are in this orientation, the higher the brand nostalgia experienced.

### 8.1.2. Brand heritage

“A dimension of a brand's identity found in its track record, longevity, core values, use of symbols and particularly in the organizational belief that its history is important” (Urde, Greyser, & Balmer, 2007; p. 4). Over a period of time, as a brand builds a history for itself, an accumulation of brand-related experiences come to shape consumer perceptions of the brand (Aaker, 1991). Recently, Rose, Merchant, Orth, and Horstmann (2016) found brand heritage to inspire positive emotions, engender trust, and facilitate brand attachment and commitment. The perceptions consumers have about the focal brand's history and heritage is likely to evoke brand nostalgia. Hence, it is posited here that the focal brand's heritage will influence brand nostalgia.

### 8.1.3. Prevention regulatory focus

Regulatory focus theory (Higgins, 1997) proposes two distinct motivational systems. Prevention-oriented individuals focus on security, safety, and protection; avoiding situations and behaviors that may be perceived as threatening or lead to painful outcomes (Higgins et al., 2001). A promotion focus, in contrast, centers on hopes, advancement and growth, and places less value on avoiding negative outcomes and security (Higgins, 1997). Studying these effects on consumer acceptance of brand extensions, Yeo and Park (2006) found that similar extensions were evaluated more favorably than less similar extensions when participants were prevention focused. This is in line with the findings of Hamstra, Bolderdijk, and Veldstra (2011), who found a prevention focus is negatively associated with uncertainty and risk taking. Keeping in mind these arguments, it is proposed here that a positive relationship exists between a prevention-focus orientation and brand nostalgia.

### 8.1.4. Sincere brand personality

Brand personality has been defined as “the set of human characteristics associated with a brand” (Aaker, 1997; p. 347). Recent research has found that the sincerity associated with a brand is related to its perceived brand authenticity (Morhart, Malär, Guèvremont, Girardin, & Grohmann, 2015). In the context of nostalgia, Braun-LaTour and LaTour (2007) found the sincerity dimension of brand personality is related to childhood memories. This indicates the potential relationship between the sincerity dimension of brand personality and the brand's ability to evoke nostalgia. Keeping in mind these insights, it is posited that perceived brand sincerity of the focal brand impacts brand nostalgia.

### 8.1.5. Brand familiarity

Familiar brands tend to be favored by consumers, as familiarity indicates that the brand is tried-and-trusted. Marketers are keen to develop brand familiarity, as it is known to facilitate consumer choice (Holden & Vanhuele, 1999). Recently, using fMRI tests, Esch et al. (2012) found that activations in brain areas associated with information retrieval were higher for familiar brands. They concluded that brand experiences should be considered to be a key driver of brand

equity. In light of these revelations, it is logical to expect that higher levels of familiarity with the focal brand will result in higher levels of brand nostalgia. To summarize, the following research hypotheses are offered:

Brand nostalgia will be positively impacted by (H1) entity theory orientation, (H2) brand heritage, (H3) prevention regulatory focus, (H4) sincerity brand personality, and (H5) brand familiarity.

## 8.2. Consequences

### 8.2.1. Brand trust

Trust is known to provide a foundation for brand loyalty (Aaker, 1996; Chaudhuri & Holbrook, 2001). It is crucial to recognize that trust develops over time, based on previous experiences in consumer-brand relationships (Xingyuan, Li, & Wei, 2010). Trusting interpersonal relationships develop by moving from a reliance on rational cognitions to a reliance on emotion and sentiment as intimacy develops (Rosenbaum-Elliott, Percy, & Pervan, 2011). In the current context, it is argued that since brand nostalgia reminds the consumer of previous experiences with the brand, it is logical to expect that it will enhance trust with the focal brand.

### 8.2.2. Brand attachment

An attachment is an emotion-laden target-specific bond between a person and a specific object (Bowlby, 1979, 1980). Thomson, MacInnis, and Park (2005) found that attachment enhances brand loyalty and the ability of the brand to command a premium price. Kessous et al. (2015) found that consumers have more attachment to nostalgic brands than non-nostalgic brands. Keeping this in mind, it is logical to expect that brand nostalgia would enhance attachment with the focal brand since nostalgia would remind the consumer about previous brand experiences, deepening the consumer-brand bond.

### 8.2.3. Self-brand connections

Brand associations and meanings are often used by consumers to construct their self-concept or to communicate “who they are” to others; thereby forming strong connections between consumers and their brands (Escalas, 2004). Meaningful self-brand connections are likely to occur when the consumer has a personal experience with the brand, and these are known to enhance brand evaluations and attitudes (Escalas & Bettman, 2005; Moore & Homer, 2008). Nostalgic brands have stronger self-brand connections than non-nostalgic brands (Kessous et al., 2015). It is therefore reasonable to expect that the nostalgia invoked by the brand is likely to bolster self-brand connections as it will remind the consumer about previous experiences shared with the brand and the rich meanings these have for the consumer.

### 8.2.4. Self-congruence

Self-congruence is the extent to which a consumer perceives a brand to be similar to his or her own self-concept (Malär, Krohmer, Hoyer, & Nyffenegger, 2011). The self-congruity hypothesis is well-established in marketing theory and argues that consumers choose brands that reflect their actual or desired self-concepts (Sirgy et al., 1997). It is proposed here that brand nostalgia will reinforce brand self-congruence through the evoked thoughts, memories and emotions that consumers have about the brand.

### 8.2.5. Behavioral intentions

Previous research indicates that nostalgia evoked by ads positively influences purchase intentions (e.g., Merchant et al., 2013). Recently, Kessous et al. (2015) found that nostalgic (vs. non-nostalgic) brands invoked higher levels of purchase intentions. In line with these findings, it is posited that brand nostalgia should result in higher levels of purchase intentions as well intentions to recommend the focal brand. To summarize, the following research hypotheses are proposed for the consequences of brand nostalgia:

Brand nostalgia will positively impact (H6) brand trust, (H7) brand attachment, (H8) self-brand connections, (H9) self-congruence, (H10) intentions to purchase and recommend.

8.3. Findings

Prevention focus was measured using items from Higgins et al. (2001, 5-items), entity theory orientation was adopted from Levy, Strossner & Dweck (1998, 8-items), brand heritage was assessed using the scale developed by Merchant and Rose (2013). Sincerity brand personality, brand trust and brand familiarity, were recorded employing items from Aaker (1997, 11-items), Chaudhuri & Holbrook (2001, 4-items) and Aaker (1991, single item). Attachment to the focal brand (Thomson et al., 2005, 3-items), self-brand connections (Escalas & Bettman, 2005, 7-items), self-congruence (Sirgy et al., 1997, 3-items), intentions to recommend (Alexandrov, Lilly, & Babakus, 2013, 3-items), and intentions to purchase (Keller, 2002, 3-items) were also measured. These questions were a part of the data collection efforts in studies 3 in the U.S. (N = 415) and Belgium (N = 245).

Confirmatory factor analyses of the entire measurement model were initially run using the emic brand nostalgia scales for the U.S. and Belgium separately. The fit of the models for the items was assessed to be good based on most fit indices (U.S. EMIC ( $\chi^2$  (2055) = 4120,  $\chi^2/df$  = 2.00, RMSEA = 0.05, CFI = 0.93, IFI = 0.93, TLI = 0.93; Belgium EMIC ( $\chi^2$  (2133) = 4040,  $\chi^2/df$  = 1.89, RMSEA = 0.06, CFI = 0.89, IFI = 0.89, TLI = 0.88)). Subsequently, confirmatory factor analyses were run using the 6-item derived etic brand nostalgia scale using the U.S., Belgian and pooled data. The fit of the models for the items was assessed to be good based on most fit indices: (U.S. ETIC ( $\chi^2$  (1248) = 2606,  $\chi^2/df$  = 2.08, RMSEA = 0.05, CFI = 0.94, IFI = 0.94, TLI = 0.94; Belgium ETIC ( $\chi^2$  (1248) = 2463,  $\chi^2/df$  = 1.97, RMSEA = 0.06, CFI = 0.91, IFI = 0.91, TLI = 0.90; Pooled ETIC ( $\chi^2$  (1248) = 3032,  $\chi^2/df$  = 2.43, RMSEA = 0.05, CFI = 0.95, IFI = 0.95, TLI = 0.95)). Reliability was assessed using the average variance extracted (ranging from 0.30 to 0.92 in Belgium and 0.44 to 0.90 on the U.S.), and all the constructs demonstrated sufficient reliability. Discriminant validity was assessed by comparing the shared variance (squared correlation) between each pair of constructs against the average variance extracted (AVE) for those two constructs (Fornell & Larcker, 1981). For both dimensions of the etic brand nostalgia scale (positive brand nostalgia and brand oldness) the AVE was higher than the variance they share with any of the constructs in the nomological network for the American and Belgian samples. Furthermore, all the other constructs of interest also exhibited discriminant validity (see Table 3).

8.3.1. Structural model with EMIC scales

The nomological network was tested using structural equations modeling in AMOS 22. The model was run with the emic brand nostalgia scales in for the U.S. (3 dimensions, 20 items) and Belgium (2 dimensions, 21 items) separately. In both cases the models exhibited reasonably good fit to the data [U.S. EMIC ( $\chi^2$  (2108) = 5205,  $\chi^2/df$  = 2.46, RMSEA = 0.06, CFI = 0.90, IFI = 0.90, TLI = 0.90; Belgium EMIC ( $\chi^2$  (2108) = 5205,  $\chi^2/df$  = 2.46, RMSEA = 0.06, CFI = 0.90, IFI = 0.90, TLI = 0.90)]. An examination of the squared multiple correlations for the endogenous constructs in the U.S. showed that this model explained 44% of the variance in positive brand nostalgia, 27% of the variance in negative brand nostalgia and 41% of the variance in brand oldness. In terms of the consequences, the model explained 58%, 81%, 81%, 79%, 67% and 77% of the variance in brand trust, attachment, self-brand connections, self-congruence, intentions to recommend and intentions to purchase respectively. In Belgium, the model using the Belgian emic brand nostalgia scale explained 28% of the variance in positive brand nostalgia and 33% of the variance in brand oldness. In terms of the consequences, the model explained 34%, 44%, 49%, 41%, 30% and 32% of the variance in brand trust,

Table 3  
Discriminant validity.

	PF	ETO	BH	SBP	BF	PBN	BO	BT	BA	SBC	SCG	ITR	ITP
PF <sup>c</sup>	(0.30, 0.44) <sup>a</sup>												
ETO	0.03	0.15 <sup>b</sup>											
BH	0.00	0.11	0.01										
SBP	0.00	0.10	0.56	0.57									
BF	0.03	0.02	0.18	0.17	0.26								
PBN	0.01	0.11	0.08	0.23	0.14	0.69, 0.67							
BO	0.00	0.01	0.33	0.25	0.12	0.17	0.62, 0.67						
BT	0.00	0.10	0.64	0.56	0.16	0.13	0.34	0.81, 0.84					
BA	0.02	0.08	0.09	0.28	0.16	0.39	0.03	0.19	0.92, 0.90				
SBC	0.03	0.09	0.04	0.21	0.10	0.39	0.00	0.10	0.62	0.83, 0.80			
SCG	0.02	0.05	0.05	0.18	0.15	0.57	0.05	0.13	0.47	0.57	0.84, 0.86		
ITR	0.00	0.08	0.30	0.40	0.27	0.42	0.19	0.46	0.45	0.29	0.28	0.87, 0.90	
ITP	0.02	0.04	0.17	0.25	0.30	0.28	0.05	0.24	0.59	0.50	0.37	0.71	0.80, 0.83

Notes: a) AVE of the construct is presented on the diagonal; other numbers represent shared variance between constructs.

b) The numbers in italics are for the American sample, remaining numbers are for the Belgian sample.

c) PF = Prevention Focus, ETO = Entity Theory Orientation, BH = Brand Heritage, SBP = Sincerity Brand Personality, BF = Brand Familiarity, PBN = Positive Brand Nostalgia, BO = Brand Oldness, BT = Brand Trust, BA = Brand Attachment, SBC = Self-Brand Connections, SCG = Self-Congruence, ITR = Intentions to recommend, ITP = Intentions to purchase.

**Table 4**  
Nomological network path analysis.

Path	US		Belgium		Pooled
	EMIC	ETIC	EMIC	ETIC	ETIC
<b>Antecedents</b>					
Brand heritage → Positive brand nostalgia	0.22	0.30	0.23	0.18	0.16
Brand heritage → Negative brand nostalgia	- 0.33				
Brand heritage → Brand oldness	0.62	0.70	0.51	0.55	0.63
Sincerity brand personality → Positive brand nostalgia	0.35	0.36	0.53	0.70	0.49
Sincerity brand personality → Negative brand nostalgia	0.18				
Sincerity brand personality → Brand oldness	- 0.16	- 0.12**	.02 <sup>ns</sup>	- 0.13**	-.02 <sup>ns</sup>
Prevention focus → Positive brand nostalgia	0.17	0.12	.07 <sup>ns</sup>	.07 <sup>ns</sup>	0.10
Prevention focus → Negative brand nostalgia	0.25				
Prevention focus → Brand oldness	0.06 <sup>ns</sup>	0.03 <sup>ns</sup>	- 0.04 <sup>ns</sup>	- 0.08 <sup>ns</sup>	- .01 <sup>ns</sup>
Entity theory orientation → Positive brand nostalgia	0.18	0.13	0.20	0.15	0.11
Entity theory orientation → Negative brand nostalgia	0.38				
Entity theory orientation → Brand oldness	0.10	0.10	- 0.14	- 0.11**	.01 <sup>ns</sup>
Brand familiarity → Positive brand nostalgia	0.27	0.25	0.32	0.37	0.29
Brand familiarity → Negative brand nostalgia	0.12				
Brand familiarity → Brand oldness	0.26	0.21	0.11**	0.12	0.19
<b>Consequences</b>					
Positive brand nostalgia → Brand attachment	1.09	1.03	0.69	0.94	1.03
Negative brand nostalgia → Brand attachment	- 0.19				
Brand oldness → Brand attachment	- 0.33	- 0.28	- 0.13	- 0.27	- 0.31
Positive brand nostalgia → Brand trust	0.83	0.66	0.22	0.36	0.56
Negative brand nostalgia → Brand trust	- 0.39				
Brand oldness → Brand trust	- 0.01 <sup>ns</sup>	0.16	0.48	0.52	0.29
Positive brand nostalgia → Self-brand connection	1.07	1.07	0.73	0.96	1.07
Negative brand nostalgia → Self-brand connection	- 0.06**				
Brand oldness → Self-brand connection	- 0.41	- 0.41	- 0.25	- 0.42	- 0.45
Positive brand nostalgia → Self-congruence	1.07	1.03	0.66	0.83	0.99
Negative brand nostalgia → Self-congruence	- 0.13				
Brand oldness → Self-congruence	- 0.36	- 0.33	- 0.10**	- 0.21	- 0.30
Positive brand nostalgia → Intention to recommend	0.96	0.80	0.44	0.66	0.76
Negative brand nostalgia → Intention to recommend	- 0.38				
Brand oldness → Intention to recommend	- 0.13	.01 <sup>ns</sup>	0.21	0.19	.05 <sup>ns</sup>
Positive brand nostalgia → Intention to purchase	1.05	0.97	0.58	0.84	0.95
Negative brand nostalgia → Intention to purchase	- 0.26				
Brand oldness → Intention to purchase	- 0.23	- 0.15	- 0.05 <sup>ns</sup>	- 0.13**	- 0.17
<b>Model fit indices</b>					
df	2108	130	2186	1301	1301
χ <sup>2</sup>	5205	3313	4902	2976	4195
χ <sup>2</sup> /df	2.46	2.55	2.24	2.29	3.22
RMSEA	0.06	0.06	0.07	0.07	0.06
CFI	0.90	0.91	0.85	0.87	0.92
IFI	0.90	0.91	0.85	0.87	0.92
TLI	0.90	0.91	0.85	0.86	0.92

Notes: <sup>ns</sup> = not significant, \*\*p < 0.10, all other t values significant at p < 0.05.

attachment, self-brand connections, self-congruence, intentions to recommend and intentions to purchase respectively. The estimated path coefficients (t-values of path coefficients tested at p < 0.05) were generally supportive of the expected relationships embodied in hypotheses 1–10, between the factors of the brand nostalgia scale and the other constructs (see Table 4 for details; it is worth noting that relationships between brand nostalgia, familiarity, attachment and trust are cross-sectional associations between the variables). To elaborate on these results, in the U.S., it was found that brand heritage, sincerity brand personality, prevention focus, entity theory orientation and brand familiarity influenced all three dimensions of brand nostalgia, which in turn had an impact on the consequences. What is interesting to note is that whereas positive brand nostalgia has a beneficial effect on outcomes (such as brand trust, attachment, intentions etc.), brand oldness and negative brand nostalgia had an adverse effect on all the consequences in the model. In Belgium, on the other hand, brand heritage, entity theory orientation, and brand familiarity impacted both the dimensions of brand nostalgia, which in turn had an impact on the consequences. What is interesting to note is that whereas positive brand nostalgia has a beneficial effect on outcomes (such as brand trust, attachment, intentions, etc.), just as in the U.S., brand oldness had an

adverse effect on some of the consequences (attachment, self-brand connection, self-congruence, and purchase intentions) in the model (see Table 4).

### 8.3.2. Structural model with derived ETIC scale

The nomological network was then run using the 6-item etic scale for brand nostalgia, all other measures were the same. This analysis was run separately for the U.S., Belgian and pooled data samples. In each case the models exhibited a reasonably good fit to the data [U.S. ETIC χ<sup>2</sup> (1301) = 3313, χ<sup>2</sup>/df = 2.55, RMSEA = 0.06, CFI = 0.91, IFI = 0.91, TLI = 0.91; Belgium ETIC χ<sup>2</sup> (1301) = 2976, χ<sup>2</sup>/df = 2.29, RMSEA = 0.07, CFI = 0.87, IFI = 0.87, TLI = 0.86; Pooled χ<sup>2</sup> (1301) = 4195, χ<sup>2</sup>/df = 3.22, RMSEA = 0.06, CFI = 0.92, IFI = 0.92, TLI = 0.92]. An examination of the squared multiple correlations for the endogenous constructs showed that this model was **superior** to the emic models in that it explained a larger proportion of variance in positive brand nostalgia - 50% in the US, 48% in Belgium and 51% of the pooled data, and 50% (47%) 48% of brand oldness in the U.S. (Belgium) and *pooled data* respectively. In terms of the consequences as well, the etic scale was also **superior** to the emic scales in its explanatory powers. For example, it explained 57% (55%) 57% of



the variance in brand trust, 84% (76%) 82% of brand attachment, and 82% (64%) 77% of purchase intentions in the U.S. (Belgium) and *pooled data* respectively. In the U.S., it was found that brand heritage, sincere brand personality, prevention focus, entity theory orientation and brand familiarity influenced both the dimensions of brand nostalgia, which in turn had an impact on the consequences. Once again in Belgium, brand heritage, entity theory orientation, and brand familiarity impacted both the dimensions of brand nostalgia, which in turn had an impact on the consequences. What is interesting to note is that whereas positive brand nostalgia has a beneficial effect on outcomes (such as brand trust, attachment, intentions etc.) in both the U.S. and Belgium, brand oldness has an adverse effect on some of the consequences (attachment, self-brand connection, self-congruence, and purchase intentions) in the model (see Table 4).

## 9. Implications

This research makes several theoretical contributions. First, it extends the nascent and emerging literature on brand nostalgia. Most existing research in this domain has focused on consumers' individual tendencies toward feeling nostalgic (e.g., Batcho, 1995; Holbrook, 1993) or on nostalgia evoked by advertisements (e.g., Merchant et al., 2013; Muehling & Pascal, 2011) or brand heritage (Merchant & Rose, 2013). The present research focus on the state of brand nostalgia is related (*but distinct*) from the consumer's nostalgia proneness (NP) and brand heritage (BH). Discriminant validity tests show that the AVE of both the dimensions of the final 6-item etic scale is greater than their  $r^2$  with NP and BH.<sup>1</sup> Existing measures of brand nostalgia have been single-item or unidimensional, and therefore unable to capture the complexity and richness of this concept. The current research therefore goes beyond existing work by expanding marketers' theoretical understanding of brand nostalgia. For example, while previous work has assumed the unidimensionality of brand nostalgia, the results here suggest that this concept is multi-dimensional, comprising both affective and perceptual components. Given the importance of nostalgia as a valuable brand attribute and a marketing tool, our cross-cultural investigation of the structure, antecedents and consequences of brand nostalgia helps expand the theoretical understanding of this construct. Second, additional information is provided for the ongoing discourse on cross-cultural scale development and reinforces the position of Hepper et al. (2014), Maheswaran and Shavitt (2000), and other scholars who note that though emotional themes (like nostalgia) may be universal, their manifestations, dimensions and subsequent measures in different markets need to imbibe the cultural contexts and nuances of that market. By conducting in-depth emic (culturally-specific) research in Belgium and the U.S., a rich understanding of brand nostalgia in the two countries was developed and a set of items to measure this concept in both places was developed. The final derived-etic scale has two dimensions – brand oldness and positive brand nostalgia. Brand oldness adds to the ongoing dialogue that emphasizes the importance consumers place on a brand's past (Brown et al., 2003; Orth & Gal, 2012). The positive memories evoked during brand nostalgia relates to interpretations that portray nostalgia as a positive experience, “*positively toned evocation of a lived past*” (Davis, 1979; p. 18; also see Batcho, 1995).

The new derived-etic scale established in this research provides brand managers with a means of empirically assessing brand nostalgia and monitoring changes over time. Firms can effectively build on their brands in such a way as to use their brand heritage and sincerity brand personality to build positive brand nostalgia (one part of brand nostalgia), which will have a significant effect upon building consumer attachment and trust in the brand. Of particular importance is the

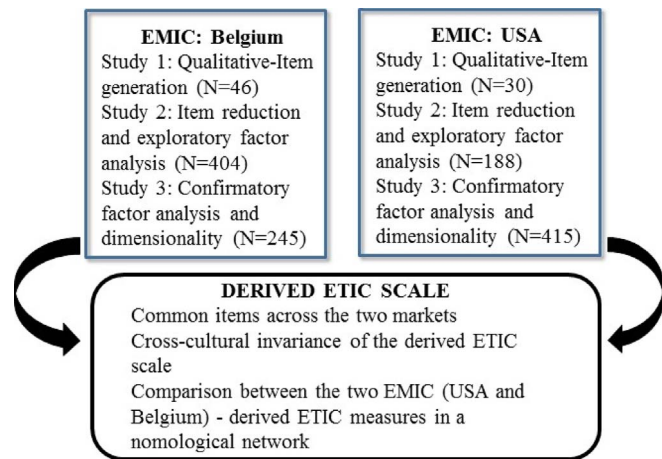
creation of feelings of positive brand nostalgia, which will have a significantly positive effect upon intention to recommend the brand to others as well as intention to purchase products associated with that brand. What is also quite interesting from a strategic standpoint is the potentially negative impact of brand oldness on a variety of important outcomes. It seems that in the U.S. and in Belgium, brands do not necessarily benefit from trying to bring out the fact that the brand is old and has “staying power.” This may indicate to consumers that the brand is old but not necessarily vibrant and alive. It may be best to stress the fact that the brand is remaining vibrant and energized. Old does not necessarily evoke positive impressions in consumers based on these results.

### 9.1. Suggestions for future research and limitations

One limitation of this study is that the cultural distance between the U.S. and Belgium is far shorter than a country like Japan or Korea. One might expect greater overlap of possible manifestations for the constructs in question when developing scales in culturally similar areas as opposed to dissimilar settings. In order to extend this research properly, it would be beneficial to bring more culturally-distant countries into the process. Future research, may examine brand nostalgia in emerging markets like India or China as these may bring even greater disparities into the various scale items. The building of emic models allows for distinct strategic insights endemic to the country/culture under study, but when attempting the establishment of derived-etic models from the emic foundational investigations, the finding of common items may be increasingly difficult. This may ultimately argue for the need for emic modeling in each country setting. It may also be worthwhile to extend this research in cultures with differing ‘orientation in time’. This is because ‘brand oldness’ might be perceived positively in past oriented cultures which attribute relatively more importance to customs and traditions than in present and future oriented cultures (Adler & Gundersen, 2007). Another limitation is that the various studies run here involved the use of online panels. While the panels are fairly broad-based and represent a variety of respondents, the data always raises questions about the true generalizability involved. Additional studies need to corroborate these findings with other data sources to enhance the validity of the results. The scale development protocols followed were rigorous and the psychometric properties of the scale were established effectively, but future research could apply the scale in other contextual settings. The use of service logos as well as other types of product logos might be helpful in future research. In this project brand nostalgia was measured using surveys. These are informative but do not accurately reflect the emotions and feelings of consumers which are better measured using biometric measures. Future studies may use physiological and biometric measures. We hope that our project stimulates and inspires more research in the fascinating and emerging area of brand nostalgia.

<sup>1</sup> AVE: BO = 0.67, PBN = 0.67, NP = 0.40, BH = 0.74;  $r^2$ : PBN-NP = 0.14; BO-NP = 0.05; PBN-BH = 0.24; BO-BH = 0.44.

SUMMARY OF RESEARCH STEPS



Appendix 1. Summary of research steps.

Appendix 2

Study 1: Product categories and brands investigated.

Product category	USA	Belgium
Cookies/ Biscuits	Oreo, Chips Ahoy, Famous Amos, Pepperidge Farms	Jules Destrooper, Bonne Maman, Bahlsen, Delacre
Beer	Corona, Budweiser, Heineken, Foster's	Maredsous, Leffe, Westmalle, Jupiler
Dairy products		La Laitière, Bonne Maman, Danette, Vitalinéa
Motorcycles		Harley Davidson, Guzzi, MV Agusta, Triumph
Cars	Chevrolet, Kia, Ford, Toyota	Mini, Toyota, Kia, Ford
Cameras	Polaroid, Fujifilm, Nikon, Kodak	Polaroid, Kodak, Fujifilm, Nikon
Clothes	Levi's, Diesel, Ralph Lauren, Gap	Petit Bateau, Levi's, Diesel, Mexx
Shoes	Converse, Puma, Nike, Adidas	Converse, Adidas, Nike, Puma
Luxury perfume		Chanel, Dior, Kenzo, Givenchy

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