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# THE IMPACT OF NOSTALGIA AND PROBABILITY MARKERS ON THE EFFECTIVENESS OF ADVERTISING CREATIVE STRATEGIES

## Abstract

The current study intends to explore the boundaries of nostalgia themed advertising combined with probability markers are combined. An experimental design was implemented with 575 valid responses obtained. The findings validate nostalgia themed advertising as a creative strategy associated to positive effects on brand attitude and purchase intentions among consumers with “high” past brand attachment. Past brand attachment emerges as an important construct as the effects significantly differ between “high” and “low” conditions. The use of probability markers, however, did not confirm the expected incremental effects on nostalgia themed advertising, with results being comparable with advertisement with no probability marker. Moreover, the use of hedges and pledges seem to perform in a similar manner among the different types of purchase motivations and level of tolerance to ambiguity. Implications for practice, limitations and future studies are presented.

**Keywords:** nostalgia, probability markers, advertising, effectiveness, behavioural intentions

## Introduction

Advertising efficacy has taken an important share in the agenda of researches as from the 70's, with new theoretical models supporting the understanding around the mechanisms behind consumers' persuasion and guiding the development of creative strategies (e.g. Aaker & Maheswaran, 1997; Petty, Cacioppo & Schumann, 1983; Mehrabian & Russell, 1974).

Among the various creative strategies, nostalgia themed advertising has started capturing attention of researchers as from the 90's (Marchegiani & Phau, 2010; Muehling & Pascal, 2011), triggered by the economic and financial crisis (Baker & Kennedy, 1994; Merchant, Latour, Ford, & Latour, 2013), with nostalgia appeals evoking good times of the past and, therefore, helping to reduce the uncertainty and insecurity.

Despite that many studies have argued in favor of nostalgia and its impact on brands' performance (e.g., Muehling & Pascal, 2011; Muehling, Spratt & Sultan, 2014; Pascal, Spratt & Muehling, 2002), the mixed nature, both positive and negative, of the nostalgia experiences has progressively been acknowledged. Thereby, nostalgia emerged as a bittersweet affective state, mood or emotion, related with experiences, products or services that recall positive

memories of the past, while generating some sadness, connected to the impossibility of returning to it, which may have negative impact while being transferred to the brand by means of cognitive associations (Baker & Kennedy, 1994; Holak & Havlena, 1992, 1998). Thus, there is still some controversy regarding the possibility of nostalgic ads restrict the analysis of the central elements of the ad, as some investigations suggest that nostalgic appeals are processed peripherally, which favors the creation of a more solid emotional bond between the consumer and the brand announced, in prejudice to the evaluation of the content of the ad itself (Muehling & Sprott, 2004; Muehling & Pascal, 2011). These findings challenge the use of nostalgia themed advertising in general and specially in contexts where central cognitive processing of the ad is essential for persuasion (as in high involvement product contexts) and invite that new studies analyze the effects of nostalgia in contexts where peripheral cognitive processing is dominant (as in low involvement products contexts). Despite that previous studies have suggested that efficiency of nostalgic themed advertising would be more skewed toward low involvement product contexts, yet studies evaluating this proposition are almost non-existent with few exceptions (e.g., Muehling & Pascal, 2012; Chou & Singal, 2017). Moreover, the effects of nostalgia themed ads. are expected to occur as long as consumers nurture a relevant past brand attachment (Muehling, Sprott & Sultan, 2014).

While evaluating whether the effects of nostalgia as a creative strategy for the advertisement of low involvement products has a positive impact for brands, the current study combines the analysis of probability markers (Tips, Berger, & Weinberg, 2006). The probability markers could be adverbs, verbs or other expression words, usually used in advertising language to serve a certain level of confidence in the message that the advertiser aims to pass on (Banks & De Pelsmacker, 2014; Berney-Reddish & Areni, 2005, 2006). Among the multiple probability markers examples with which we are often faced, there are the pledges (e.g., certainly, undoubtedly, always and definitely) and the hedges (e.g., probably, perhaps, may and

help). These resources are part of the language style and represent a set of pragmatic features of the language, which can change the way the recipient understands it (Blankenship & Holtgraves, 2005). Despite being in general accepted as factors that may positively affect the persuasiveness of ads (Banks & De Pelsmacker, 2014; Blankenship & Holtgraves, 2005, Blankenship & Craig, 2011), there is still controversy on how significant are the effects of probability markers on persuasion (Areni, 2002; Berney-Reddish & Areni, 2005, 2006), with results being suggested as depending on consumers' level of involvement with the product, privileging low involvement product contexts (Banks & De Pelsmacker, 2014).

The logic behind probability markers being more efficient for low involvement products builds from the understanding that in these contexts consumers focus their thoughts on the aspects not related to the main advertising message (central route), but to the peripheral one. Therefore, probability markers act like a heuristic cue that influences directly the individual's assessments, mostly when they are in a lower condition of involvement with the product/service (Berney-Reddish & Areni, 2005, 2006; Banks & De Pelsmacker, 2014). This proposition was validated in the context of services, where the use of probability markers is beneficial as they compensate the uncertainties intrinsic to service intangibility with assertiveness (Banks & De Pelsmacker, 2014). However, it was not yet validated in the context of physical products.

The common characteristic between nostalgia themed advertising and probability markers concerning the mechanisms of cognitive processing of the ad during purchase decision making, has motivated their combination. As a result, the current study focuses on understanding the effects of nostalgia themed advertising and the use of probability markers (hedges and pledges) as a language style in the context of low involvement product.

Furthermore, in order to explore the boundary conditions, the effects of nostalgia themed advertisement with probability markers (hedges and pledges) are evaluated in the context of physical product, as opposed to previous studies focused on services (Banks & De

Pelsmacker, 2014), with the type of purchase motivation (hedonic and functional) (Banks & De Pelsmacker, 2014; Berney-Reddish & Areni, 2005) and the level of consumers' tolerance to ambiguity being considered (Banks & De Pelsmacker, 2014).

In sum, the aspects above mentioned intend to elaborate on the use of nostalgia as a creative strategy which is evaluated in the current research by means of the following research questions: *i*) are nostalgia themed ads in low involvement physical product contexts effective in driving purchase intentions and brand attitude; *ii*) does the use of probability markers enhance the effects of nostalgia themed ads on purchase intentions and brand attitude; *iii*) do the level of past brand attachment, type of purchase motivation and level of consumers' tolerance to ambiguity influence the effects of nostalgia themed ads on purchase intentions and brand attitude.

### **Theoretical background**

The S (stimuli)-O(organism)-R(response) framework offers theoretical support for elaborating on the research questions proposed. The S-O-R expresses that the stimuli affect the individual' emotional and cognitive states, whose response may result in approach or avoidance behaviors. In the adaptation from psychology proposed by Mehrabian and Russell (1974), stimuli are designed as environmental cues, organisms comprise cognitive and emotional states and responses are accepted as approach or avoidance related types of behaviors. Interpreted in context of the current research the stimuli comprises the nostalgia and non-nostalgia themed ads with and without probability markers, the organism comprises the understanding, liking and acceptance toward the ad (Defever, Pandelaere & Roe, 2011; MacKenzie & Lutz, 1989; Madden, Allen, & Twible, 1988) and the response is captured by means of consumers' purchase intentions and brand attitudes (e.g., Yu & Chang, 2013; Singh & Banerjee, 2018). In line with

this rational, in the following paragraphs the literature in nostalgia and probability markers is presented and hypotheses linking these stimuli with respective responses are proposed.

### *Nostalgia in advertising*

The term nostalgia was first coined by Johannes Hofer (1688), in his medical dissertation, to denote a medical illness with a range of possible symptoms (e.g., homesickness, anxiety, insomnia and irregular heartbeat) that affected the Swiss expatriate mercenaries who, with suffering (*algos*), yearned to return (*nostos*) to their homeland (Hepper et al., 2014; Sedikides et al. 2008; Wildschut et al., 2006). Until the middle of the 20<sup>th</sup> century, the nostalgia remained the diagnosis for a disease frequently associated with extreme depression, melancholy and homesickness (Baker & Kennedy, 1994). Since then, the idea of nostalgia was no longer seen as a medical or mental health problem to become the subject of much more pleasant connotations, such as those who consider it a fundamental psychological strength that is important for the own self-esteem but also for survival and social rapport with others (Hepper et al., 2014; Juhl, Routledge, Arndt, Sedikides, & Wildschut, 2010; Sedikides et al., 2008; Wildschut et al., 2006).

In advertising the use of nostalgia themed creative strategies has generated some polarization with some studies revealing mixed effects derived from the negative associations that also integrate nostalgia emotional states and their impact to the advertiser as image transfer occurs (Baker & Kennedy, 1994; Holak & Havlena, 1992, 1998; Muehling & Pascal, 2011; Muehling & Sprott, 2004).

Moreover, there is still some controversy regarding the possibility of nostalgic ads restrict the analysis of the central elements of the message conveyed by the advertiser, as some investigations suggest that nostalgic appeals are processed peripherally (Muehling & Sprott, 2004; Muehling & Pascal, 2011). The peripheral processing of nostalgic ads builds from the

Elaboration Likelihood Model (ELM), which distinguishes between the central and the peripheral processing route for persuasion. It suggests that in the decision making of high involvement products consumers tend to dedicate more time and effort to understand the core of the advertising message and process its understanding accordingly (central route), whilst in contexts of low level of involvement, consumers focus their thoughts on the aspects not related to the core of the message, but to its peripheric aspects (e.g., nostalgic appeal).

These two polarizing arguments against the use of nostalgia themed advertising invite the proposition of new studies able to validate whether in low involvement product contexts (peripheric route of processing) the nostalgia emotional state generates effective results in advertising. Although, previous studies have suggested the skewness of nostalgic themed advertising toward low involvement product contexts, studies evaluating this proposition are almost non-existent with few exceptions (e.g., Chou & Singal, 2017).

Furthermore, the effects of nostalgia themed advertising may be expected to occur as long as consumers acknowledge their emotional link with the brand in the past, which allows the transfer of associations to take place. This proposition highlights the conditional effects of consumers past brand attachment (Loureiro & Kaufmann, 2012; Muehling, Sprott & Sultan, 2014). The effects above mentioned are captured in the following hypotheses:

**H1a:** The effects of consumers exposure to nostalgia themed advertisement in low involvement product contexts are likely to produce favorable brand attitudes, especially among consumers who have higher past brand attachment.

**H1b:** The effects of consumers exposure to nostalgia themed advertisement in low involvement product contexts are likely to have a positive impact on purchase intentions, especially among consumers who have higher past brand attachment.

*Probability markers in advertising*

The effective use of the written and spoken language is key in creating persuasive ads (Blankenship & Craig, 2011; Blankenship & Holtgraves, 2005). In the current research, the feature of the language style under review are the probability markers. The probability markers could be adverbs, verbs or other expression words, usually used in advertising language to serve a certain level of confidence in the message that the advertiser aims to pass on (Banks & De Pelsmacker, 2014; Berney-Reddish & Areni, 2005, 2006).

Among the multiple probability markers examples there are the pledges (e.g., certainly, undoubtedly, always and definitely) and the hedges (e.g., probably, perhaps, may and help). Areni (2002) explains that the pledges suggest an absolute truth, being considered therefore as a powerful language to the extent of conferring the absolute confidence on what is advertised. Hedges, on the other hand signalize a probable truth, and are used by advertisers in situations where claiming the absolute truth would evoke low credibility. As such, the hedges represent a powerless language whose function is to instill a major or minor probability.

The use of pledges and hedges in advertising is a common practice (Areni, 2002; Berney-Reddish & Areni, 2005, 2006), despite contradictory results being obtained. Results in favor of the use of probability markets argue that they lead to an increasing acceptance of advertising appeals (e.g., truth rating) (Harris, Pounds, Maiorelle & Mermis, 1993; Banks & De Pelsmacker, 2014) and consequently a more favorable attitude toward the brand and greater purchase intention.

Other studies, however claim different results, with harmful effects for the persuasive power of the message source being associated to the use of hedges (Berney-Reddish & Areni, 2005, 2006; Blankenship & Holtgraves, 2005; Durik, Britt, Reynolds, & Storey, 2008; Holtgraves & Lasky, 1999) and limited conditional effects being associated to the effective use of pledges (Berney-Reddish & Areni, 2005). In reaction to the contradictory results, the use of probability markets was proposed as conditional to specific characteristics associated to the



level of product involvement, the type of purchase motivation (hedonic versus utilitarian), and consumers' tolerance to ambiguity (Banks & De Pelsmacker, 2014).

Relatively to the level of consumer involvement, Banks and De Pelsmacker (2014) find that the probability markers affect the advertising effectiveness to low involvement services, but not to high involvement services. Thus, in the context of probability markers the Elaboration likelihood model (ELM) also provides a plausible explanation to the lack of consensus relatively to the positive effects of probability markers in advertising (e.g., Gelbrich, Gätke & Westjohn, 2012; Martín-Santana & Beerli-Palacio, 2013; Banks & De Pelsmacker, 2014). In high involvement decision making processes, the content of the advertising message (e.g., quality of the argument, the number of arguments) imprints a more bounded effect on the consumers' attitudes and behaviors, than the other factors not related to the content (e.g., attraction of the message source, credibility of the message source), as opposed to what happens when the product involvement is low (Petty et al., 1983).

Therefore, probability markers act like a heuristic cue that influences directly the individual's assessments, mostly when they are in a lower condition of involvement with the product/service (Banks & De Pelsmacker, 2014). This means that when the individual has no knowledge or motivation to understand carefully the message information, the usage of probability markers can have stronger effects on consumers' attitude toward the brand and purchase intentions. On the other hand, in conditions of high involvement, the probability marker's effect is not clear, because it could even generate distraction, increase the possibility of a posterior persuasion or, even, make believe that the strong argument is less strong and a weak argument is less weak (Petty et al., 1983; Blankenship & Craig, 2011).

In the current research it is proposed that probability markers could be combined in nostalgic ads for enhancing their effectiveness as both creative strategies are claimed as being more efficient in driving persuasion of messages that are processed at the peripheral route, with

nostalgia appeals benefiting from the assertiveness of probability markers. This understanding supports the proposition of the following hypotheses:

**H2a:** The effects of consumers exposure to nostalgia themed advertisement in low involvement product contexts are more likely to produce favorable brand attitudes when the ad has probability markers then when the ad has no probability markers.

**H2b:** The effects of consumers exposure to nostalgia themed advertisement in low involvement product contexts are more likely to produce higher purchase intention when the ad has probability markers then when the ad has no probability markers.

Moreover, the type of purchase motivation (hedonic and utilitarian) and personality traits (tolerance for ambiguity) are also associated to the conditional effectiveness of probability markers (Zhao, Li, Teng, & Lu, 2014; Banks & De Pelsmacker, 2014; Berney-Reddish & Areni, 2005). Hedonic motivations are generated by affective experiences with a certain product (e.g., pleasure, entertainment and fantasy) while utilitarian motivations are associated with the product total utility perceived (e.g., functions) (Batra & Ahtola, 1990; Voss, Spangenberg, & Grohmann, 2003). Tolerance to ambiguity is a relatively stable personality trait that distinguishes the individuals, particularly in what concerns their preference for stimulus more or less ambiguous (Furnham & Marks, 2013; Furnham & Ribchester, 1995; Herman et al.; 2010; McLain, Keffalonitis, & Armani, 2015).

In advertising a more tolerant consumer, not only accepts better the most ambiguous stimulus, less familiar or even less congruent, but he also considers it desirable, interesting and enthusiastic (Furnham & Ribchester, 1995). Meantime, individuals who are less tolerant to ambiguity tend to prefer a clearer language, entirely without ambiguities or uncertainties (Furnham & Ribchester, 1995).

While combining both conditions, the use of hedges in ads which are and more linked to pleasure (hedonic purchase motivation), are an effective way to boost the attitude toward the

brand and purchase intentions, especially when the brand target is more tolerant to ambiguity (Banks & De Pelsmacker, 2014). On the other hand, the use of pledges in ads that are more functional (utilitarian purchase motivation) tend to be effective, especially when among those that are less tolerant to ambiguity. This is due to the fact that utilitarian products are usually less personalized, less dependent to subjective experiences and easier to compare with each other than hedonic ones.

In view of previous findings, the current research proposes that the use of hedges is more effective for products related to hedonic motivations than the use of pledges, especially among consumers that are more tolerant to ambiguity, meantime the use of pledges is more effective for products related utilitarian motivations than the use of hedges, especially among consumers that are less tolerant to ambiguity. The following hypotheses capture these effects:

**H3a:** The effects of consumers exposure to nostalgia themed advertisement of hedonic products are more likely to produce favorable brand attitudes when the ad has hedges than when it has pledges, especially among consumers that are more tolerant to ambiguity.

**H3a:** The effects of consumers exposure to nostalgia themed advertisement of hedonic products are more likely to produce higher purchase intentions when the ad has hedges than when it has pledges, especially among consumers that are more tolerant to ambiguity.

**H4a:** The effects of consumers exposure to nostalgia themed advertisement of utilitarian products are more likely to produce more favorable brand attitudes when the ad has pledges than when it has hedges, especially among consumers that are less tolerant to ambiguity.

**H4b:** The effects of consumers exposure to nostalgia themed advertisement of utilitarian products are more likely to produce higher purchase intentions when the ad has pledges than when it has hedges, especially among consumers that are less tolerant to ambiguity.

## **Methodology**

In view of the research objectives, an experiment with factorial design 2 (types of product: hedonic and utilitarian) x 2 (creative strategies: nostalgic and non-nostalgic/control condition) x 3 (language styles: pledge, hedge and no probability marker) was implemented. In total, 12 different conditions (split in 6 groups as all respondents were presented to the two types of products) were prepared according to the following criteria. Two product categories were chosen for representing hedonic and utilitarian product types (beer and tooth paste respectively) in low involvement product categories (Banks & De Pelsmacker 2014; Muehling & Sprott, 2004; Muehling, Sprott & Sultan, 2014; Kim et al. , 2012; Zaichkowsky, 1985; Voss et al., 2003). Both brands selected (Colgate and Heineken) represent an important market share in the geographic area where data collection occurred (Portugal) and comply with the criteria established in the pre-test. The two probability markers selected were probably (as a hedge) and certainly (as a pledge) (Banks & De Pelsmacker, 2014). For developing the nostalgic and non-nostalgic ads, guidelines from former studies were adopted with nostalgic ads using dates (e.g. in the 90's), words (e.g., relive, remember, recall) and specific background colors (e.g., warm colors: red, sepia, yellow) as cues that evoke nostalgia (Muehling & Sprott, 2004; Muehling, Sprott & Sultan, 2014). On the other hand, the non-nostalgic ads were a more traditional type of appeal, evoking positive and pleasant references of the present or the future (e.g., year, technologies) (Zhao et al., 2014). Final stimuli tested are presented in Figure 1 and 2.

INSERT FIGURE 1 AND 2 HERE

#### *Development of the stimuli*

In order to develop and validate the 12 advertisements used in the experiment, three sequential pre-tests were implemented. In the first study (an online survey with 55 valid responses) one of the main objectives was to validate the brands selected for being known (brand awareness) and liked (brand liking). Moreover, the product category was inspected for being low in involvement and complying with the hedonic (beer) and utilitarian (tooth-paste) criteria (based

on Zaichkowsky, 1994). Remaining questions were intended to evaluate the stimuli for their ability to evoke acceptable ad liking (Madden, Allen & Twible, 1988), pleasantness (Broach Jr., Page & Wilson, 1995), visual appeal (Cox & Cox, 1988), vividness (Petrova & Cialdini, 2005), processing flow (Lee & Aaker, 2004) and nostalgia (Pascal et al., 2002; Muehling, Sprott & Sultan, 2014).

In the second and third pre-tests (an online survey with 64 and 50 valid responses respectively) probability markers were also included in the stimuli. For the analysis of results, ANOVAs (IBM-SPSS 25) were implemented and averages were compared in-between groups, with the objective of identifying needs for improvement and balance the various stimuli.

#### *Development of the questionnaire*

For the final data collection an online survey was created. In total, six constructs were measured. The two first ones were used to control for the stimuli, with credibility of the message (two items from Darley and Smith, 1995) and nostalgic feelings evoked (ten items from Pascal et al., 2002) being measured using end points *Completely disagree* (1) and *Completely agree* (7). Specific questions to validate the understanding of the stimuli were also introduced. Tolerance to ambiguity (twelve items from Herman et al., 2010) and past brand attachment (four items from Muehling, Sprott & Sultan, 2014) were measured using end points *Completely disagree* (1) and *Completely agree* (5). Finally, the two dependent constructs, namely brand attitude (three items from Sengupta and Johan, 2002) and purchase intentions (four items from Doods, Monroe & Grewal et. al., 1991) were measured using endpoints *Completely disagree* (1) and *Completely agree* (7).

The original items were translated from English to Portuguese by two bilingual researchers and back translated to English by other two bilingual researchers, so the meaning intended in the original items was assured in their translation.

### *Sampling procedures*

In total 2000 emails were sent to university students (from bachelor to masters degree) from 18-35 years. This age range was pre-established so that the sample profile would be susceptible of having comparable nostalgic thoughts or experiences (Muehling & Sprott, 2004; Muehling, Sprott & Sultan, 2014; Zhao et al., 2014). The emails were randomly selected from a list with contacts provided by two universities. An URL with the link to the questionnaire was provided in the email.

As respondents accessed the link, they were initially exposed to common questions related to their demographics and tolerance to ambiguity. At this stage, consumers were also asked if they knew both brands used in the research. All consumers who knew both brands were than randomly allocated to one of the six groups. Once allocated to the specific group, respondents were exposed to ads from the two brands (Colgate and Heineken). The order of brands were randomized and presented separately, so respondents would first answer to questions regarding the first ad presented (as e.g. Heineken) and only afterwards were presented to the second ad (e.g., Colgate) and asked the respective questions.

### *Data analysis procedures*

Initial statistical analyses were performed for validating the scales regarding their unidimensionality and reliability (Churchill, 1979; Anderson, Gerbing, & Hunter 1987), using IBM SPSS statics V.25. The constructs were checked for their reliability considering a minimum value of 0.65 for Cronbach's alpha. The value of the Cronbach's alpha if item deleted was also inspected. For validating unidimensionality a six-factor solution was considered with factor loadings being required to be high loaded (above 0.5) in only one component.

In the following phase, the stimuli were inspected, with differences between nostalgic and non-nostalgic stimuli being expected to differ in the level of nostalgia evoked. Moreover, the credibility of the message was also inspected, with results being expected not to differ among stimuli. The analyses were performed using one-way ANOVAs, as the data were normally distributed (as concluded in Kolomov-Smirnov Test).

In the next stage, the hypotheses were checked using non-parametric Kruskal Wallis test. Moreover, when significant results were obtained, specific interactions were further inspected by means of Wilcoxon-mann-whitney tests. Same procedure was adopted for all hypotheses as data was not normally distributed, as suggested in Kolomov-Smirnov Test).

## **Results**

In total 575 valid responses were obtained, with most respondents in the age group between 18 and 26 years old (81%). The split between groups is shown in Table 1.

INSERT TABLE 1 HERE

### *Measurement scales*

As mentioned in the data analysis procedures, the scales were checked for their reliability and unidimensionality. The results are presented in Table 2. The original scale of tolerance to ambiguity had some items reversed and then inspected for Cronbach alpha. As results initially obtained were not acceptable ( $<0.65$ ), the original items were inspected in factorial analysis, with items falling out of the unidimensional criteria being considered for deletion. A new Cronbach alpha was processed with acceptable results obtained ( $<0.65$ ). The remaining constructs were validated for reliability and unidimensionality as originally proposed, with results presented in Table 2.

Once that the constructs were validated, averaged summations were prepared for each of the brands. Furthermore, participants were classified into “high” (values  $> 3.25$ ) and “low”

tolerance to ambiguity, according to the means obtained in the summation scale. The same procedure was adopted for past brand attachment, with participants being classified into “high” (values > 2.29 for Heineken and 3.51 for Colgate) and “low” past brand attachment for each of the brands.

#### *Manipulation check*

The stimuli were checked for their evoked nostalgia and credibility using one-way ANOVAs (as above mentioned). As expected, nostalgic stimuli ( $M_{\text{NOST}}$ : 3.55) was perceived significantly different than non-nostalgic stimuli ( $M_{\text{NOST}}$ : 2.31) ( $F$ :14.83;  $p$ -value: 0.00). Moreover, credibility between advertisements with and without probability markers did not differ ( $F$ : 1.33;  $p$ -value: 0.25) between stimuli with pledge ( $M_{\text{CRED}}$ : 3.52), with hedges ( $M_{\text{CRED}}$ : 3.69) and no probability marker ( $M_{\text{CRED}}$ : 3.85).

#### *Hypotheses Test*

In hypotheses H1a and H1b it was proposed that the effects of consumers exposure to nostalgia themed advertisement in low involvement physical product contexts are likely to produce favorable brand attitudes and positive impact on purchase intentions, especially among consumers who have high past brand attachment. For analyzing these hypotheses total sample was used and respondents with “high” past brand attachment (as above defined) were compared with others (“low”). The analyses were performed comparing the effects on brand attitude and purchase intentions between groups (2 creative strategies: nostalgic and non-nostalgic x 3 executions: pledges, hedges and no probability marker) being performed separately for the two brands. Analyses were performed with Kruskal Wallis non-parametric test for evaluating differences in means between groups, which were afterwards further inspected with Wilcoxon-mann-Whitney tests (as above mentioned).



The results were first analyzed for Colgate, indicating that when groups are compared, significant differences on brand attitude and purchase intentions are identified ( $F_{BA}: 11, p < 0.01$ ;  $F_{PI}: 11, p\text{-value}: 0.00, n: 575$ ), suggesting that further inspection should be performed. In order to address the hypotheses proposed, two groups were first inspected. Nostalgia themed and non-nostalgia themed advertising (control condition) were compared in a condition of high past brand attachment (with no probability marker). Results reveal no significant differences between groups ( $F_{BA}: -1.07, p\text{-value}: 0.31$ ;  $F_{PI}: -0.37, p\text{-value}: 0.70, n: 87$ ) as nostalgia themed advertising ( $M_{BA}: 5.56, M_{PI}: 5.43$ ) were similar to non-nostalgic themed advertising ( $M_{BA}: 5.25, M_{PI}: 5.32$ ) (as in Table 3).

#### INSERT TABLE 3 HERE

Comparable effects were obtained for Heineken indicating that when groups are compared, significant differences on brand attitude and purchase intentions are identified ( $F_{BA}: 11, p\text{-value}: 0.00$ ;  $F_{PI}: 11, p\text{-value}: 0.00; n: 575$ ) suggesting that further inspection should be performed. In order to address the hypotheses proposed, two groups were first inspected (as in Colgate). The results of main path proposed in the hypotheses are presented in Table 3, indicating no significant differences between nostalgic and non-nostalgia themed advertising (control condition) in “high” past brand attachment condition. Therefore, H1a and H1b were accepted, with nostalgia themed advertising revealing similar effects on brand attitudes and purchase intentions as non-nostalgia themed advertising in “high” past brand attachment condition (with no probability marker).

Additionally, the researchers explored a different route, comparing differences between high and low past brand attachment separately for nostalgia and non-nostalgia themed advertising (with no probability marker). Results revealed that past brand attachment drives the differences observed between groups independently from the type of stimuli being nostalgia themed or not. This finding is depicted from comparing the following averages obtained in Colgate: *i*) nostalgia themed advertising (no probability marker) with “high” past brand attachment ( $M_{BA}: 5.56, M_{PI}: 5.43$ ) versus equivalent group but with “low”

past brand attachment ( $M_{BA}$ : 3.83,  $M_{PI}$ : 3.89) ( $F_{BA}$ : - 5.55, p-value: 0.00;  $F_{PI}$ : - 4.62, p-value: 0.00, n: 86);  
*ii*) non-nostalgia themed advertising (no probability marker) with high past brand attachment ( $M_{BA}$ : 5.25,  $M_{PI}$ : 5.32) versus equivalent group yet with “low” past brand attachment ( $M_{BA}$ : 3.83,  $M_{PI}$ : 4.0) ( $F_{BA}$ : - 4.68, p-value: 0.00;  $F_{PI}$ : - 4.10, p-value: 0.00; n:100). These results are consistent in Heineken.

In Hypotheses 2a and 2b it was proposed that nostalgia themed advertisements in low involvement product contexts are more likely to produce favorable brand attitudes and purchase intentions when the ad has probability markers than when the ad has no probability markers. In order to evaluate the results, the same data extraction as in the previous hypotheses (H1a and H1b) was considered, with only nostalgia themed advertisement in “high” past brand attachment condition being analyzed, in view of the significant effects imprinted by this construct. Moreover, the analyses were focused on comparing the effects on brand attitude and purchase intentions between groups exposed to stimuli with hedge (probably), pledge (certainly) and no probability marker (control).

The results for Colgate reveal that no significant differences on brand attitude and purchase intentions are obtained between the conditions with hedge ( $M_{BA}$ : 5.38,  $M_{PI}$ : 5.44), pledge ( $M_{BA}$ : 5.39,  $M_{PI}$ : 5.62) and with no probability marker ( $M_{BA}$ : 5.56,  $M_{PI}$ : 5.43). This result was also consistent in Heineken, with hedge ( $M_{BA}$ : 5.09,  $M_{PI}$ : 5.11), pledge ( $M_{BA}$ : 4.71,  $M_{PI}$ : 4.85) and stimuli with no probability marker ( $M_{BA}$ : 4.51,  $M_{PI}$ : 4.48) revealing no significant differences between averages. This result was confirmed when differences between groups exposed to hedge and no probability marker were further inspected with Wilcoxon-mann-Whitney tests ( $F_{BA}$ : -1.03, p-value: 0.3;  $F_{PI}$ : -1.23, p-value:0.22). Therefore, hypotheses 2a and 2b were not accepted, with stimuli with probability markers obtaining a comparable performance to stimuli with no probability markers.

In hypotheses 3a and 3b it is proposed that nostalgia themed advertisement of an hedonic product is more likely to produce favorable brand attitudes and purchase intentions when the

ad has hedges than when it has pledges, especially among consumers that are more tolerant to ambiguity. In order to evaluate the results a new data extraction was implemented with only nostalgia themed advertisement for the hedonic brand (Heineken) being considered and respondents with “high” tolerance to ambiguity (as above defined) being compared with others (“low”) in hedge (probably), pledge (certainly) and no probability marker conditions. Statistics were performed with Kruskal Wallis non-parametric test for evaluating differences between groups.

The results reveal no significant difference between groups ( $F_{BA}: 5$ , p-value: 0.52;  $F_{PI}: 5$ , p-value: 0.35, n: 290). In line with this result, while inspecting the specific path hypothesized, nostalgia themed advertisements with hedge ( $M_{BA}: 3.69$ ,  $M_{PI}: 3.70$ ) revealed means close to advertisements with pledge ( $M_{BA}: 3.60$ ,  $M_{PI}: 3.66$ ) among respondents that were “high” in tolerance to ambiguity. Therefore, H3a and H3b are not accepted.

In hypotheses H4a and H4b it is proposed that the effects of consumers exposure to nostalgia themed advertisement of an utilitarian product are more likely to produce more favorable brand attitudes and purchase intentions when the ad has pledges than when it has hedges, especially among consumers that are less tolerant to ambiguity. In order to evaluate the results a new data extraction was considered using the same conditions as in the previous hypotheses (H3a and H3b), except for being considered only the utilitarian brand (Colgate). Statistics were performed with Kruskal Wallis non-parametric test for evaluating differences in means between groups.

The results reveal no significant difference between groups ( $F_{BA}: 5$ , p-value: 0.25;  $F_{PI}: 5$ , p-value: 0.67 n: 290). In line with this result, while inspecting the specific path hypothesized, nostalgia themed advertisements with pledge ( $M_{BA}: 4.60$ ,  $M_{PI}: 4.80$ ) revealed means close to advertisements with hedge ( $M_{BA}: 4.62$ ,  $M_{PI}: 4.74$ ) among respondents that were “low” in tolerance to ambiguity. Therefore, H4a and H4b were not accepted.

## *Discussion*

Hypotheses 1a and 1b address the controversy existing around the effects of nostalgia-themed advertising. For evaluating these hypotheses nostalgia themed advertising was compared with non-nostalgia themed (control condition) on its effects on brand attitudes and purchase intentions. The findings reveal that consumers react positively to nostalgia themed advertising as the effects on brand attitudes and purchase intentions are similar between both creative routes. This result corroborates the idea that nostalgia may perform well as an alternative creative strategy for advertisers. Moreover, the findings also contribute to raise attention over the relevance of past brand attachment as a moderating construct. This result was acknowledged when nostalgia themed advertising was compared for its effects on a “high” versus “low” past brand attachment, with significant differences obtained.

In hypotheses 2a and 2b the use of probability markers in nostalgia themed advertising were tested for their potential effects. For analyzing these hypotheses stimuli with hedges (probably), pledges (certainly) and no probability markers were compared and consumers with “high” past brand attachment were considered. Results indicate that the presence of probability markers (pledges and hedges) does not generate incremental effects on brand attitudes or purchase intentions compared to advertisements with no probability markers.

In the remaining hypotheses specific conditions were inspected with the type of product and the level of consumers’ tolerance to ambiguity being expected to influence the effects of probability markers. Therefore, in hedonic products, advertisements with hedges were expected to have more positive effects than with pledges, especially among consumers with high tolerance to ambiguity (H3a and H3b). On the other hand, in utilitarian products, advertisements with pledges were expected to perform better than hedges, especially among consumers with less tolerance to ambiguity (H4a and H4b). The results show no significant differences between

the conditions, with hedges and pledges obtaining comparable effects on brand attitude and purchase intentions among different levels of tolerance to ambiguity and types of product.

## **Conclusions**

Despite that many studies have argued in favor of nostalgia themed advertising and its impact on brands' performances (e.g., Bambauer-Sachse & Gierl, 2009; Muehling & Pascal, 2011; Muehling, Sprott, & Sultan, 2014; Pascal, Sprott & Muehling, 2002), the encapsulated sadness of nostalgia has generated some controversial results regarding the associations transferred to the brand (Baker & Kennedy, 1994; Holak & Havlena, 1992, 1998). The controversy around nostalgia is also associated with the type of cognitive processing of nostalgic messages, with studies positioning it as a distracting element in advertisements of high involvement products and simultaneously suggesting that further studies evaluate its effectiveness in low involvement product contexts (Sherman & Quester, 2005; Muehling & Pascal, 2011; Chou & Singal, 2017). The current study focused on addressing this opportunity, exploring the boundaries of nostalgia as a creative strategy to drive persuasion in advertising of low involvement products. Furthermore, "high" and "low" past brand attachment was considered for its influence which despite being proposed in previous studies (Muehling, Sprott & Sultan, 2014) was not yet further explored.

Moreover, the current study evaluated whether the use of probability markers increase brand attitude and purchase intentions in contexts of "high" past brand attachment condition. While analyzing that, the type of purchase motivation (hedonic or utilitarian) and personal characteristics (tolerance to ambiguity) were considered for their potential influence on the choice of probability markers (pledge and hedge) (Banks & De Pelsmacker, 2014).

The findings validate nostalgia themed advertising as a creative strategy associated to positive effects on brand attitude and purchase intentions among consumers with "high" past

brand attachment. Past brand attachment emerges as an important construct as the effects significantly differ between “high” and “low” conditions. The use of probability markers, however, did not confirm the expected incremental effects on nostalgia themed advertising, with results being comparable with advertisement with no probability marker. Moreover, the use of hedges and pledges seem to perform in a similar manner among the different types of purchase motivations and level of tolerance to ambiguity.

From theoretical perspective the current study extends the literature in advertising as it contributes to clarify two controversial topics. First, regarding the use of nostalgia themed advertising the findings help to position it as a creative route of positive impact in low involvement products. Therefore, even if previous studies indicate that nostalgia may carry some negative tonality and generate distraction in the decision-making processes, in the context of low involvement products nostalgia generates positive effects on brand attitude and purchase intentions when compared with non-nostalgia themed advertising. These effects are associated to the emotional meanings transferred to the advertiser (Muehling & Pascal, 2011; Muehling & Sprott, 2004), with similar results obtained for products associated to hedonic and utilitarian motivations. Moreover, past brand attachment emerges as a determinant aspect, so the effects of nostalgia are increased if consumers perceive that their relations with the brand is rooted in past experiences. In that sense, nostalgia appeals seem to be more effective when are complementary to associations already existing, so consumers may *find* the brand within the nostalgic appeal presented. The relevance of past brand attachment had already been raised in previous studies (Muehling, Sprott & Sultan, 2014), but yet not further explored.

The second topic of controversy is regarding the use of probability markers. The initial proposition was that as probability markers are accepted as an effective heuristic cue in peripheral processing of advertising messages (Banks & De Pelsmacker, 2014), their use could be beneficial for the assertiveness of nostalgia themed advertising which has a common

processing mechanism (Muehling & Spratt, 2004; Muehling & Pascal, 2011). However, the results do not support this rational, contributing to reinforce the idea that the use of probability markers is of limited interest as they do not drive incremental effects to nostalgia themed advertising. This result is consistent across different purchase motivations (hedonic and utilitarian) and individuals' personality traits (tolerance to ambiguity). The effects obtained may be related to the relative position of probability markers compared to nostalgia in the processing of the message, with nostalgia overtaking the presence of probability markers. As nostalgia is considered a deep emotional psychological state important for individuals' own self-esteem and rapport with others (Hepper et al., 2014; Juhl et al., 2010; Sedikides et al., 2008; Wildschut et al., 2006) it may deviate consumers attention from the markers introduced in the message.

From the managerial point of view, the results suggest that advertisers can make use of nostalgia themed advertising as a creative alternative as long as their brand has some sort of built-in ground for exploring nostalgia, in the sense of having a relevant number of consumers who personally relate to the past of the brand. Moreover, the findings reveal that probability markers used as a standalone language style (as in the stimuli), do not add value to nostalgia themed advertising. In the current research, the markers were intentionally applied as add-ons, which were not completely integrated in the core of the creative idea. From this perspective, the results should not be interpreted by managers as a straightforward recommendation for not using probability markers, but to avoid their use as add-ons not integrated at the core of the creative idea.

Furthermore, the findings above presented need to be interpreted within some limitations. Among them is the choice for exploring nostalgia based on two already existing brands (Heineken and Colgate). This decision has allowed that past brand attachment was analyzed, however it may have had impact, with brand familiarity potentially compensating for effects of low tolerance to ambiguity. The choice for the nostalgia appeals used in the stimuli

was focused on personal type of nostalgia, which is usually better evaluated for its effects than other types (e.g. historic nostalgia) (Muehling & Pascal, 2011, 2012; Chou & Singal, 2017; Muehling, Sprott & Sultan, 2014). Moreover, the study was limited to two types of probability markers and within that to two words (certainly and probably). Therefore, findings should be interpreted within the personal type of nostalgia and specific probability markers.

Future studies could extend the findings by means of broadening the scope of nostalgic types of appeals, using different markers and exploring advertising executions where probability markers are built-in as essential part of the creative idea. Moreover, future studies could further explore the boundary conditions within which nostalgia themed advertising impacts low involvement products (e.g., by type of media) and extend the analyses beyond the impact on brand attitude and purchase intentions (e.g., brand love).

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Table 1: Sample size in each condition

<i>Conditions</i>	Nostalgia Themed	Non-Nostalgia Themed (control condition)
No Probability Markers	86	100
Pledge	110	101
Hedge	94	84

Table 1: Factor Loadings from Factorial Analysis and Alpha-Cronbach

Construct	Factor loading range	Alpha Cronbach
INVERTED	(0.472-0.888)	0.662
P	(0.748-0.818)	0.896
N	(0.768-0.927)	0.977
A	(0.787-0.816)	0.897
c	(0.674-0.687)	0.88*
Pi	(0.831-0.837)	0.910

\*Reliability of the two items scale calculated with Spearman-Brown Coefficient

Table 3: Nostalgia and Non-Nostalgia themed advertising (control condition) (H1a and H1b) - Wilcoxon-mann-whitney

Colgate

Group	$M_{BA}$	$F_{BA}$	$P\text{-value}_{BA}$	$M_{PI}$	$F_{PI}$	$P\text{-value}_{PI}$
A	5.56	-1.07	0.3	5.43	-0.37	0.70
B	5.25			5.32		

Heineken

Group	$M_{BA}$	$F_{BA}$	$P\text{-value}_{BA}$	$M_{PI}$	$F_{PI}$	$P\text{-value}_{PI}$
A	4.51	-1.1	0.26	4.48	-0.2	0.83
B	4.25			4.42		

A: Nostalgia themed; High past brand attachment (no probability marker)

B: Non-Nostalgia themed (control condition); High past brand attachment (no probability marker)

Figure 1: Stimuli for Heineken

No probability marker	Pledge (certainly)	Hedge (probably)
<p>Non-Nostalgia Themed (1)</p> 	<p>Non-Nostalgia Themed (3)</p> 	<p>Non-Nostalgia Themed (5)</p> 
<p>Nostalgia Themed (2)</p> 	<p>Nostalgia Themed (4)</p> 	<p>Nostalgia Themed (6)</p> 

Heineken:

- Do you want to travel around the world? Lisbon 2015 (stimuli 1, 3 and 5)
- Remember your old friends? Lisbon 2009, (stimuli 2, 4 and 6)
- Present in all best cities in the world (stimuli 1 and 2)
- Certainly present in all best cities in the world (stimuli 3 and 4)
- Probably present in all best cities in the world (stimuli 5 and 6)

Figure 2: Stimuli for Colgate



Colgate:

Did you notice what has recently happened ? Instagram, Iphone 6, Whatsup, Snapchat ? (stimuli 1, 3 and 5)

Remember the times when you were younger ? Action Man, Barbie, Tom & Jerry, Playstation ? (stimuli 2, 4 and 6)

The most shining smiles (stimuli 1 and 2)

Certainly the most shining smiles (stimuli 3 and 4)

Probably the most shining smiles (stimuli 5 and 6)