

Empirical Study of the Influences of Different Types of Nostalgic Advertisements on Mechanism of Action of Purchase Intention

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Abstract—Nowadays nostalgic advertising is more and more widely used in academia and business as a marketing tool, which makes it worth studying how different types of nostalgic advertisements affect different age levels of consumer specifically. In this paper, an empirical research method was used and the empirical exploration was made through simulation experiment in laboratory. The results show that young people tend to prefer the virtual collective nostalgia appeal, and middle-aged people tend to prefer personal nostalgic appeal. The study has a strong academic and practical significance, which will provide a theoretical support to companies which need to develop nostalgia marketing strategies from the perspective of academic research.

Keywords—Nostalgic Advertising; Nostalgia Strength; Personal Nostalgia; Virtual Collective Nostalgia; Purchase Intention

I. INTRODUCTION

In the marketing field of science, research and application of nostalgia marketing has become increasingly common. Researchers can remember clearly about the classic ads of Southern black sesame paste made in 1991. One evening in a granite street of southern town, a mother and her daughter with goods lugging on their shoulders went into a deep alley while a small oil lamp suspended from the burden. Then a little boy who smelt the fragrance of sesame paste rushed out of the deep house and reached the burden following the cries. Meanwhile, voice-over is sounded, "I could no longer sit still hearing the cries of sesame paste when I was a child..." The little boy ate the sesame paste in big bowl quickly and licked the bowl after nothing left. The mother gave him another spoon lovingly and wiped the residual paste on the boy's face. Meanwhile, voice-over is sounded, "an aroma, a ray of warmth." Elements such as childhood memories, granite alleys, selling and other nostalgic things in ad can cause nostalgia feelings easily. It is also the ad makes the sales of

the South sesame paste grew at an alarming rate. Another representative of nostalgic ad is the one of Kirin afternoon tea made in 2006. In the ad, the late movie star Audrey Hepburn rode a bicycle happily with basket filled with bottles of afternoon tea. When she arrived at a florist, she shared her afternoon tea with the florist hostess. Meanwhile, Audrey Hepburn also revealed a charming smile. The company tried to attract consumers by using Audrey Hepburn as a nostalgic element, but they did not achieve the expected result since it made the viewers disgusted.

The two cases above get distinctive effect although they are both nostalgia advertisings. Therefore, the author is to study how these different types of nostalgia advertisings affect consumers' purchase intention, so as to provide a theoretical basis for enterprises who intend to develop nostalgia marketing.

II. LITERATURE REVIEW AND ASSUMPTIONS

A. Study of consumer nostalgia and purchase intention

By studying the internal factors for consumer nostalgic tendency, Holbrook and Schindler (2003) proposed the formation model of consumer nostalgia preference. In the role of environmental and physiological effects, consumers are prone to strong emotional consumption experiences according to ages, genders and product types, and finally generate the nostalgia preference combined with the nostalgic elements. Researches indicated that nostalgic preferences were closely related to consumer's age, gender and the type of products. Consumer's preference to products and brands was often generated by some strong emotional consumption experiences. Therefore, it is assumed that emotional consumption experiences have impact on consumer nostalgia preference. Different product categories will form different nostalgic preferences, for example, cultural products and automotive products are more likely to stimulate consumer's nostalgic feelings. Of course, not all consumers can be easily affected by the

nostalgia-related products. To which extent the consumer is affected depends on his/her own attitude to the past. More sensitive the consumer is to the past, more nostalgic feelings he/she will have.

Pascal, Sprott and Muehling (2002) studied how nostalgia aroused by marketing stimuli affected consumer's purchase intention. Quantitative study found that advertising and brand attitude could be improved by nostalgic emotions, and this improvement of nostalgia increased the likelihood of consumer buying. Thus Pascal (2002) proposed a nostalgia - attitude - purchased model. See Figure 1.

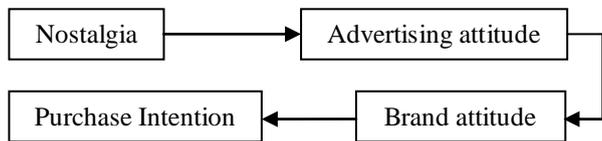


Figure 1. Nostalgia - Attitude - purchased Models

Domestic scholars have also made some progress on consumer nostalgia. Zhang Yi (2012) divided the factors affecting consumer nostalgic emotion into indirect and direct ones, which was the "generation-effect" model he proposed. Indirect factors include individual factors such as individual experience and personality, and external factors such as social environment, cultural environment and others. Direct factors refer to the factors showing certain nostalgia strength and consumers stimulated by them tend to be nostalgic, including the marketing stimuli such as old pictures, classical sounds, the ever-popular taste and so on. Of course, these marketing stimuli also need mediating variables such as brand attachment to generate consumer willingness to buy.

B. Study of nostalgic advertising

The nostalgia marketing means to do nostalgia-related marketing activities to stimulate consumers' nostalgic emotions and their nostalgic memories, and ultimately promote their willingness to buy. Nostalgic advertising is a nostalgic stimuli which takes advantage of nostalgic items or topics to make consumers think of the past (Reisenwitz, Iyer & Cutler, 2004). Advertisers hope that the nostalgia-related stimulus (such as nostalgic words, pictures, music, etc.) can stimulate consumers' nostalgia for the good old days, and thus have a positive attitude towards advertising, brands, products and purchase intention.

Most of researches on nostalgic advertising are about the impact of advertising on nostalgic emotion, advertising attitude and brand attitude, and few of them study the dimensions of nostalgic advertising. From the perspective of the nostalgia demands, Wu Chaijun et al. (2011) divided the nostalgic advertising into personal nostalgia and virtual collective nostalgia. Personal nostalgia is based on individual previous experience, and is closely related to individual social circle (Stern, 1992). Therefore, individual previous experience can provide the basis for the personal nostalgia, which is able to explain inter-individual differences in the strength of nostalgia (Holak, Havlena & Matveev, 2006). Collective nostalgia is relationship-oriented, and is related to society, culture, generations, groups and other aspects, which emphasizes the relationship between individuals and their previous experience (Baker & Kennedy, 1994). Thus, compared

with personal nostalgia, collective nostalgia shows more commonality, which provides a direction for enterprises to make nostalgic marketing plan (Holak, Havlena & Matveev, 2006).

C. Study of nostalgic strength and appeal objects

The generation of nostalgic emotion includes two steps: nostalgic tendency and nostalgic strength. Many scholars focused on nostalgic tendency, while nostalgic strength had been ignored or confused with nostalgic tendency for a very long time. Scholars did not study the similarity and difference between nostalgic tendency and nostalgic strength until past few years ago. For example, Reisenwitz, Iyer and Cutler (2004), Peng Qinghui et al. (2009), Christopher (2010) had done some researches on nostalgic strength. Nostalgic tendency does not act directly on the consumer decision-making or buying behavior, and it must be transformed into nostalgic strength to the objects under external stimuli. Reisenwitz (2004) found a positive correlation between personal nostalgic tendency and nostalgic strength of advertising, product and company.

An appeal object of advertising refers to the target market to which an ad information spreads. The segmentation of appeal objects also can be considered as segmentation of consumers. The dimension of the segmentation has various types such as gender, age, income and so on. Nostalgia can change with age. Holak et al. (1992) found that individuals were prone to nostalgia in their middle-age. Some scholars have also pointed out consumers' nostalgia is not just related to their physical age, but their actual cognitive age (Goulding, 1999). Reisenwitz, Iyer and Cutler (2004) made a more in-depth research on the relationship between nostalgia and age. The study indicated a significant positive correlation between the nostalgic tendency and age, but in which the personal nostalgic tendency positively correlated with age, and social nostalgic tendency negatively correlated with age.

In summary, the existing literatures have made a certain progress in nostalgic advertising. There are various perspectives from which the scholars have done on how nostalgic advertising stimulates consumers' purchase intention, but few of them did it from dimension of nostalgic advertising. Thus this article divides nostalgic advertising into two dimensions (personal nostalgia & virtual collective nostalgia), and then use nostalgic strength as mediating variable to study how nostalgic advertising stimulates consumers' purchase intention, and finally explore the consumer response from different age levels. The assumptions are as follows:

H1: Nostalgia strength has a positive influence on purchase intention.

H2: Nostalgia strength has a mediating effect between nostalgic appeal and purchase intention.

H3: Compared with virtual-collective-nostalgic advertising, personal-nostalgic advertising has a greater nostalgic strength to middle-aged people.

H4: Compared with personal-nostalgic advertising, virtual-collective-nostalgic advertising has a greater nostalgic strength to young people.

H5: The appeal objects of nostalgic advertising have a moderating effect between advertising appealing and aroused nostalgic strength.

H6: Compared with virtual-collective-nostalgic advertising, personal-nostalgic advertising has a greater influence on purchase intention of middle-aged people.

H7: Compared with personal-nostalgic advertising, virtual-collective-nostalgic advertising has a greater influence on purchase intention of young people.

III. STUDY DESIGN

A. Model

The research model shown in Figure 2 below was established according to the previous theoretical analysis:

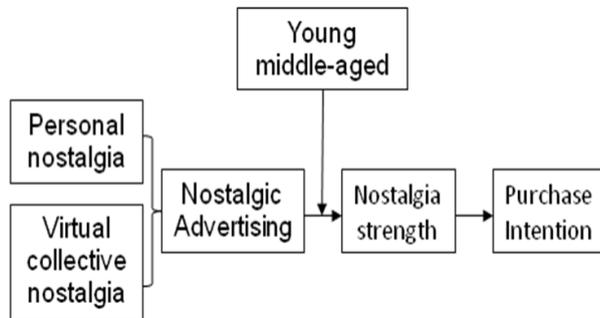


Figure 2. Researching Model

B. Samples and data sources

Scales used in experiments were as follows: demographic scale, purchase intention scale (Pratt, 1974; Zaltman, 1995; Kenneth, 2000), a nostalgic tendency Scale (Holbrook, 1993), a nostalgic intensity scale (Pascal, Sprott, Muehling, 2002), familiarity scale. Except for demographic scale, other scales used Likert 5-point scoring method.

C. Measurement scale

Simulation method was used to collect data in the paper. Advertisings of Reeb beer and Nanchang beer which represented two different types of nostalgia advertisings respectively were studied. Content analysis was applied to determine the specific type. The experiment enrolled a total of 60 test subjects, including 30 people between the ages of 20-39, the group of which was defined as a youth group, and 30 people between the ages of 40-59, the group of which was defined as the middle-aged group. Statistical analysis of the experimental data was made by SPSS16.0.

IV. EMPIRICAL ANALYSIS

A. Descriptive statistics

30 people were selected to each experiment. The experimental group of Reeb Beer included 18 male and 12 female, among them 22 were married; the experimental group of Nanchang Beer included 21 male and 9 female, among them 18 were married. The sex ratio of the subjects corresponded with the drinking buying habits of Chinese consumers.

The subjects were asked to write down the first association after reading the ad to conduct content analysis of classifying ad types. Results in Table 1 show that the ad of Reeb beer is "personal nostalgic" and that of Nanchang beer is "virtual collective nostalgic".

TABLE I. CATEGORY OF ASSOCIATION

Nostalgic Advertising	Personal nostalgia	Virtual collective nostalgia	Advertising Evaluation	Other
Reeb Beer	15	3	5	7
	50.00%	10.00%	16.67%	23.33%
Nanchang beer	3	14	8	5
	10.00%	46.67%	26.67%	16.67%

B. Scale reliability and validity

1) Reliability test.

Cronbach's α reliability test was used to check measurement scales. The results are shown in Table 2.

TABLE II. CRONBACH'S α TEST OF SCALE

Scale name	Quantity Item	Cronbach's α coefficient
Purchase Intention Scale	4	0.902
Nostalgia intensity scale	10	0.954
Familiarity	3	0.786

The results in Table 2 show that Cronbach's α coefficients of purchase intention scale and nostalgia intensity scale were both more than 0.9, indicating that the reliability of two scales is very good; Cronbach's α coefficient of familiarity scale is close to 0.8, indicating a good scale reliability. Therefore, these three measurement scales meet the research requirements.

2) Validity test.

In order to measure the scale validity, KMO and Bartlett's test of sphericity, the scale of the total variance explained, the scale of the ingredient matrix were carried out. The concrete results are shown in Table 3.

TABLE III. KMO AND BARTLETT'S TEST OF SCALE

Scale name	KMO	SIG
Purchase Intention Scale	.737	.000
Nostalgia intensity scale	.923	.000
Familiarity	.622	.000

The results in Table 3 show that significant probability p value of three scales is close to zero. The principal component analysis was measured for three scales by varimax rotation method. After extracting a common factor eventually, purchase intention scale factor explains 77.806% of variable variance, nostalgic intensity scale factor explains 71.303% the variable variance, familiarity scale factor explains 70.179% of the variance of the variables. In addition, the composition matrix analysis of the three scales also achieved good results. Therefore, the validity of three measurement scales meets the research requirements.

3) Differences analysis affected by purchase intention

In this experiment, purchase intention was measured as a dependent variable and 2 (nostalgic appeal: the individual virtual collective nostalgia and nostalgia) x 2 (point: pretest and posttest) two-way ANOVA was used. The concrete results are shown in Table 4.

TABLE IV. TESTS OF BETWEEN-SUBJECTS EFFECTS

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Nostalgic appeal	34.669	1	34.669	124.187	.000
Time	32.552	1	32.552	116.604	.000
Nostalgic appeal * Time	12.352	1	12.352	44.246	.000

The results show that the main effect of nostalgic appeal and testing is highly significant, the interaction effect between nostalgic appeal and test point is also highly significant. ($P < 0.001$)

Combining the test results of T value on purchase intention before and after the two experiments (Reeb group is highly significant $P = < 0.001$; Nanchang group is significant $P = 0.006 < 0.05$), researchers find that nostalgic appeal has a significant effect on consumer's purchase intention, nostalgic advertising can forward enhance the consumer's purchase intention.

4) Intermediary effect test

For further investigating the effect of the nostalgic advertising on consumer purchase intention, successively inspection method was used to test the intermediary effect of nostalgia intensity when nostalgic advertising affects consumer's purchase intention. The significance of the intermediary effect on nostalgic intensity was verified with three steps of data analysis. The concrete results are shown in Table 5.

TABLE V. TESTS OF MEDIATION EFFECTS

	Model 1 Advertising → Purchase Intention		Model 2 Advertising → Nostalgia strength		Model 3 Advertising → Nostalgia strength → Purchase Intention	
	β	T	β	T	β	T
Nostalgic appeal	.500	6.280	.270	3.040	.358	5.324
Nostalgia strength					.528	7.838
R ²	.250		.073		.509	
F	39.435***		48.677**		109.214***	

The main effect was verified in Model 1. The results show a significant c value and a very significant model fitting degree, which means a very significant main effect. Whether the independent variable X has a significant effect on the mediating variable M or not was verified in Model 2. The results show a significant model fitting degree and a significant effect of nostalgic advertising on nostalgia intensity. In order to test the significance of intermediary effect, data analysis was measured to the whole model with the addition of a intermediate variable in Model 3. The results show a significant regression effect and a significant nostalgia intensity β value of 0.528. The comprehensive results in Table 5 indicate that nostalgic appeal has a direct effect on purchase intention, mediating

effect is significant and the mediating variable nostalgia intensity plays some role in intermediary effect.

5) Moderating effect

In this experiment, nostalgia intensity was measured as a dependent variable and 2(nostalgic appeal: the individual virtual collective nostalgia and nostalgia) x 2 (claim object: young people and middle-aged people) two-way ANOVA was used. The concrete results are shown in Table 6.

The results indicate that the main effect of claim object is not significant ($p = 0.420 > 0.05$), the main effect of nostalgic appeal is highly significant ($P < 0.001$) and the interaction effect of nostalgic appeal and claim object on nostalgia intensity is also highly significant ($P < 0.001$).

TABLE VI. TESTS OF BETWEEN-SUBJECTS EFFECTS

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Nostalgic appeal	4.294	1	4.294	14.029	.000
claim object	.200	1	.200	.654	.420
Nostalgic appeal * claim object	19.120	1	19.120	62.467	.000

Further examination of simple effect shows that the nostalgia intensity produced by personal nostalgic appeal ads ($M = 4.480$) is significantly higher than that by virtual collective nostalgic appeal ads ($M = 3.303$) in middle-aged group, but the nostalgia intensity produced by virtual collective nostalgic appeal ads ($M = 4.020$) is significantly higher than that by personal nostalgic appeal ads ($M = 3.600$) in youth group.

In conclusion of above test results and experimental hypothesis, positive results are achieved in this study. All assumptions have been well verified except that assumption 2 was partly done.

V. CONCLUSIONS AND FUTURE RESEARCH DIRECTIONS

Studies have found that reminiscent factors in reminiscence advertisements can stimulate positive emotion of the audiences, who will have feelings with certain intensity of reminiscence. And the audiences are prompted to shift this reminiscent emotion to the products in the advertisements, so that they are more willing to buy the products. The empirical study shows that purchase intention brought by reminiscent advertisements has positive linear relationship with the intensity of reminiscence. Youth population tend to prefer virtual group reminiscent appeals, while middle-aged population tend to prefer individual reminiscent appeals; reminiscent effect produced by reminiscent advertisements, namely reminiscent intensity and purchase intention, both matches with these inclinations. This provides theoretical support for enterprises to make reminiscent advertisement marketing strategy. More specific reminiscent advertisement strategies can be applied on products aiming at different audiences, so that enterprises have practical basis for reminiscent marketing, which has a very strong significance in reality.

Although reminiscent advertisements are the objects of study in the present research, the prevailing reminiscence - themed movies like <For Youth> and <Fleet of Time > can also be studied in similar way. Studying reminiscent

compositions is one of the most important directions of researches in the future. In addition, researches can also be developed in directions like: other classification perspectives of reminiscent appeals, other subdivided dimensions of objects of reminiscent appeals, and reminiscent advertisements of high - involvement products.

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