# Perceived Brand Age Scale Development

**Leila Andervazh**[*] **and Hossein Vazifehdust**
Department of Business Management, Science and Research Branch, Islamic Azad University, Tehran, IRAN

## Abstract

*This research introduces a methodology for developing a scale measurement of the perceived brand age. In short, it starts with a literature survey on the perceived brand age and its principals together with identifying its influential factors. In order to scale development, the relevant items are used. For this purpose, we used literature in the construct of perceived brand age together with asking the opinions of marketing experts. After a test of validity and reliability in the first place, we asked for the opinion of KIA's consumers in Tehran to conduct the research. By the same token, a total number of 450 questionnaires were used for the data analysis. In the second place, after proposing Brand attractiveness, Brand uniqueness together with Market roles in the marketplace as new dimensions for the perceived brand age, EFA in combination with CFA are applied via smart PLS to check the performance of the measurement respecting the dimensions. In the final analysis, a final measurement consisting of 13 Items; 5 items for brand Attractiveness, 6 items for brand Uniqueness and 2 items for Market role in the marketplace is devised.*

**Keywords**: Brand age, perceived brand age, brand personality, market role, Confirmatory Factor Analysis (CFA), Exploratory Factor Analysis (EFA).

## Introduction

Understanding brand age is potentially critical for a brand management program. When a brand begins to be perceived as older, even with the positive attributes aligned with the idea of traditional and established brands, consumers may begin to move away from the brand[1]. Although, there may be no diminution in their concept of the quality of the brand, and the brand may even still be highly appreciated, the negative aspects relevant to an older brand age might give rise to outweigh the positives. In particular, the ideas of being "out of touch" and "irrelevant" overshadow appreciation for the brand. Consequently, the brand simply becomes less relevant and therefore is no longer present in the consumer's evoked set[1, 2]. "Whatever their status, their chronological age, their share of the market and/or their share of intellect, could get old either slowly or quickly"[2]. A brand can be very aged chronologically, but remain young, vibrant and modern in its consumer's minds[1-2]. That is, in such cases, we see the best instances of brand revitalization.

Brand age related factors have been suggested to impact consumers' attitudes and behaviors. Such relationships might have significant implications for marketing, branding, advertising researchers and practitioners[3]. The present study outlines the development of a scale for perceived brand age measurement. This study defines and develops the concepts of perceived brand age.

The rest of this paper is organized as follows. First, we survey the relevant literature and theoretical framework. The last section outlines the implications of our findings and discusses avenues for further research.

## Literature Survey

**Perceived brand age:** Equally, there is very little published work in the area of brand age. Darpy and Levesque conclude that there are three items that load on each of the two factors, social and physical. Graceful/Disgraceful, Beautiful/Ugly and Aesthetic/Unaesthetic all load on the physical factor, while Visible/Insignificant, Innovative/Traditional and Present/In Withdrawal load on the social factor[4]. While this approach is valuable for understanding perceived brand age as a construct not unlike that of perceived human age, we believe there may be more value when you apply the concept of brand personality in place of the physical dimension. This brings in other important factors, which are not included in their description of the physical dimension of a brand. Some cases might include reputation and quality, both of which would be highly relevant in the instance of a brand. Brand personality along with social factors (we apply the term market roles will form the foundation of perceived brand age. We define perceived brand age, as a consumer understanding of the age of a particular brand in a defined class. In this circumstance, age represents the duration of time that a brand has existed (although age can be viewed across a spectrum of numbers from one on up, consumers most frequently think of brand age as younger or older). Guillory investigated two dimensions for perceived brand age. These dimensions were brand personality and market role. In this research after reviewing the literature, we suggest targeting in advertising as another dimension for perceived brand age[5.]

**Brand personality:** Azoulay and Kapferer[6] hypothesize that including demographics such as age as a function of brand personality runs the risk of confounding the personality of the brand with the personality of the targeted consumer as evidenced in the brands advertising and marketing. They also argue that demographics such as gender are value judgments and are based on acculturation. In this research, we agree that demographics such as age are most likely stand-alone constructs separate from brand personality. All the same, we hypothesize that brand personality does have an effect on a typical brand perceived the age. Just as human personality traits give us estimation about a person's level of experience, maturity, creativity and coolness, we expect a brand personality traits will bring succor us on judging brand age.

**Market roles**: Social factors (market roles), which contribute to a brand life, include the innovation, the restoration, brand extensions, new uses of the products, and product modifications[1].Consumers use this information to convey financial stability, competency and energy in a brand[4]. At a broad level of abstraction, the everyday execution of marketing plans and tactics can be construed as behaviors performed by the brand acting in its relationship role[7]. Brands can have varying marketing objectives and thereby varying roles within a class. The target of a marketing strategy can be to master the market through upholding and keeping the current status quo, a category stabilizer. This is a marketing function, which takes time and exposure in society to be successful. Referable to the factor of time, it is more likely to be associated with brands that are comfortably founded and well experienced with a considerable percentage of the marketplace. These are likely to be brands that have helped to produce and sustain the current standards in an industry. Some other marketing strategy might be to challenge the category status quo, and be an innovator in some way, a category changer. Brands can innovate in terms of the product, the distribution system, the price or the way in which the product is promoted. The concept of modifying the category is usually connected with a newness that could mean being "cool" or "hip"1.

**Advertise targeting**: Target marketing alludes to the recognition of a set of purchasers offering basic needs or aspects that a company or an organization chooses to serve[8]. It has seemingly been the primary driving force behind the accomplishment of a great deal of famous trade names (e.g., Pepsi, Mercedes-Benz, Miller Lite). That is, it offers the premise of a prevalent marking technique, like the user situating methodology where the brand is closely related to a specific user or customer (e.g., Maybelline and the girl next door). In other words, Target Marketing signifies those who have expressed vigorous affinity for a specific brand. In this regard, different methods can be found in the literature[9-15]. Exploring different target markets for offering higher affinity levels for brands. These methods cover an extensive range from: common racial kindred attributes, role congruity, labeling, and intensity of ethnic recognition, shared cultural erudition, to ethnic

salience that altogether have proved positive influences on the target market[9-14]. This research generally depicts the operation by which target marketing is driven by consumers' inference of kindred attribute between the features of the advertisement (e.g., source pictured, language utilized, lifestyle represented) and features of the consumer (e.g., authenticity or desire of having the represented lifestyle)[15]. Hence, persuasion is ameliorated by setting a match between the advertisement features together with the consumer characteristics, compared to the case where no such match is made[9,16]. On the other hand, negative non target market, having different nature, such as need, belief, or value of the consumer might encounter in the case when advertisement cues are non-congruent. In such case, a typical advertisement source introduces features that are different from those of the viewer (e.g., when the advertisement individuals constitute a group which the viewer is not a group member), these propitious effects should not accrue. Rather, viewers in the non-target market may perceive heterogeneity between the designated advertisement target and themselves (as conveyed through source or non-source targeting cues). As a consequence, individuals may deduct that their preferences are different from that of the intended target and therefore fail to take the favorable position toward the advertising. Anecdotal evidence indicates that people viewing an advertisement that has not been contrived to appeal to their market segment are likely to view the advertisement as distracting or even annoying might feel ignored, or even alienated[17-19]. Therefore, non-target market influences are differentiated not by a failure to achieve favorable target market effects, but also a decreased preference for an advertisement by individuals who think they are not the target of the advertisement[5].

## Methodology

**Scale Development Procedures: Development of Initial Set of Scale Items (Pool of Items):** Based on a process proposed by Gilbert and Churchill in relation to the evolution of an appropriate measure in marketing, the first step is to examine the scope of the intended construct that is, exploring literature in relation to it. After a literature review, the related items should be produced. In this respect, employing literature on the construct of perceived brand age and seeking opinions of Ph.D. students of marketing with fulfillment of a questionnaire about relevant items for measurement of perceived brand age48 items were pulled. These points were developed based on existing literature research on perceived brand age and opinions of Ph.D. students of marketing on the intended constructs in the present study included brand personality with 42 items and the market roles with 3 items advertising with3 items. Based on their opinion irrelevant items eliminated. Therefore brand personality with 13 items, and market role with2 items were made. Hence, the following step was adopted; the points were formulated using a Likert scale.

**Purification Items:** Based on a process proposed by Gilbert and Churchill in relation to the evolution of an appropriate

measure in marketing, the first step is to examine the scope of the intended construct that is, exploring literature in relation to it. After a literature review, the related items should be produced. In this respect, employing literature on the construct of perceived brand age and seeking opinions of Ph.D. students of marketing with fulfillment of a questionnaire about relevant items for measurement of perceived brand age48 items were pulled. These points were developed based on existing literature research on perceived brand age and opinions of Ph.D. students of marketing on the intended constructs in the present study included brand personality with 42 items and the market roles with 3 items advertising with3 items. Based on their opinion irrelevant items were eliminated. Therefore brand personality with 13 items, and market role with2 items were made. Hence, the following step was adopted; the points were formulated using a Likert scale.

**Main study: Sample:** In the next step, in order to conduct the main study Automobile consumers in Tehran who have at least in the experience of buying the intended product (KIA OPTIMA) were used. In total, 450 questionnaires were completed and gathered. Based on collected data, 69.4% of the sample consisted of females and the rest (30.6%) were males. Also 30.6% of the sample consisted singles and 69.4% were married.

## Results and Discussion

In the first phase after data collection, exploratory factor analysis (EFA) for perceived brand age was employed by using SPSS software. In order to ensure adequacy of sample for conducting EFA, Kaiser-Meyer-Olin (KMO) test is utilized by taking the value of 0.852 for the perceived brand age. The obtained result is presented in table-2.

After conducting EFA, irrelevant items were deleted. With this in mind, Commonalities are shown in table-2 and table-3.

**Table-1**
**Content validity ratio (Lowshe coefficient)**

| CVR | Items | CVR | Items | CVR | Items | CVR | Items | CVR | Items | CVR | Items |
|---|---|---|---|---|---|---|---|---|---|---|---|
| -50 | 41 | 1 | 33 | 1 | 25 | -50 | 17 | -50 | 9 | -50 | **1** |
| -1 | 42 | 1 | 34 | -50 | 26 | 83 | 18 | 83 | 10 | -33 | **2** |
| 1 | 43 | **83** | 35 | 1- | 27 | -50 | 19 | 66 | 11 | -50 | **3** |
| 1 | 44 | 66- | 36 | 1 | 28 | -50 | 20 | -50 | 12 | **-83** | 4 |
| 1 | 45 | -66 | 37 | **83** | **29** | 1 | 21 | 1 | 13 | **-83** | **5** |
| **-16** | 46 | -50 | 38 | 1 | 30 | -33 | 22 | -33 | 14 | -66 | **6** |
| 1 | **47** | -1 | 39 | 1 | 31 | **-83** | **23** | **-83** | 15 | -66 | **7** |
| 1 | 48 | -66 | 40 | 0.66 | 32 | -66 | 24 | -66 | 16 | -33 | **8** |

**Table-2**
**KMO and Bartlett's Test**

| Measurement Test | | Measured value |
|---|---|---|
| **Kaiser-Meyer-Olkin Measure of Sampling Adequacy.** | | **0.852** |
| Bartlet's Test of Sphericity | Approx. Chi-Square | 2054.932 |
| | df | 153 |
| | Sig. | 0.000 |

Commonalities below 0.5 were eliminated because of irrelevancy of items. At the end of EFA, items were decreased to 13 items for perceived brand age. These results are depicted in table-3.

**Table-3**
**Communalities**

| Questions | Initial | Extraction |
|-----------|---------|------------|
| q1 | 1.000 | .586 |
| q2 | 1.000 | .596 |
| q3 | 1.000 | .546 |
| q4 | 1.000 | .598 |
| q5 | 1.000 | .617 |
| q6 | 1.000 | .516 |
| q7 | 1.000 | .719 |
| q8 | 1.000 | .675 |
| q9 | 1.000 | .523 |
| q10 | 1.000 | .598 |
| q11 | 1.000 | .544 |
| q14 | 1.000 | .758 |
| q15 | 1.000 | .773 |

As we shown in table 4 we investigate three components. The rotated component matrix is represented in table5, which demonstrate the factor loadings for each variable in the remaining components after the rotation. The larger the absolute value of the coefficients, the greater the role of the component within the total variation range of the relevant variable.

**Discussion:** The purpose of the present study was to develop a measure of perceived brand age, which is based on Darpy and Lévesque approach; they develop their scale for perceived age based on the social and physical factors for a brand. The physical dimension is again similar to a person's physical dimension, where we utilize all the properties of physical appearance, which aid us to understand and settle a person's age categorization. Physical traits in a person could be height, weight, style and expression. For a brand this would include elements such as packaging, communications and product design. Darpy and Levesque conclude that there are three items that load on each of the two factors, social and physical. Graceful/Disgraceful, Beautiful/Ugly and Aesthetic/Unaesthetic all load on the physical factor, while Visible/Insignificant, Innovative/Traditional and Present/In Withdrawal load on the social factor. While this approach is valuable for understanding perceived brand age as a construct not unlike that of perceived human age, we believe there may be more value when you apply the concept of brand personality in place of the physical dimension. This brings in other important factors, which are not included in their description of the physical dimension of a brand. Some examples might include reputation and quality, both of which would be highly relevant in the case of a brand. Brand personality along with social factors (we use the term market roles) will form the foundation of perceived brand age.

## Conclusion

The main objective of the research was perceived brand age scale development. Research steps were designed and after conducting reliability and validity tested and EFA and CFA, final measure were designed consisting of 13 items;5 items for brand attractiveness and 6 items for brand uniqueness and 2 items for market roles. This article explains the development of a practical three-dimensional measure of perceived brand age. In this research, brand personality split into two separate dimensions, including brand attractiveness and brand uniqueness. These dimensions of perceived brand age explain consumer choice better, both statistically and qualitatively. All value for standardized factor loading was above 0.5. Composite reliability and chronbach's α were summarized in Table 6. Data suggest the presence of reliability.

Among the limitations of the present survey, the one which showed that just one product of each type was viewed. So in order to generalize the measure taken out in the present research, it is recommended that it will be tested among other consumers using more products and reliability and validity of it will be measured in those settings. Besides, future research is demanded to develop scales similar to the customer value scale for other consumption contexts and in other culture.

**Table-4**
**Total Variance Explained**

| Component | Initial Eigen values | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 5.435 | 41.804 | 41.804 | 5.435 | 41.804 | 41.804 | 3.253 | 25.026 | 25.026 |
| 2 | 1.600 | 12.310 | 54.114 | 1.600 | 12.310 | 54.114 | 3.195 | 24.578 | 49.603 |
| 3 | 1.015 | 7.807 | 61.921 | 1.015 | 7.807 | 61.921 | 1.601 | 12.318 | 61.921 |
| 4 | .791 | 6.087 | 68.008 | - | - | - | - | - | - |
| 5 | .686 | 5.273 | 73.281 | | | | | | |
| 6 | .579 | 4.452 | 77.734 | - | - | - | - | - | - |
| 7 | .540 | 4.157 | 81.891 | - | - | - | - | - | - |
| 8 | .528 | 4.058 | 85.949 | - | - | - | - | - | - |
| 9 | .467 | 3.589 | 89.537 | - | - | - | - | - | - |
| 10 | .399 | 3.071 | 92.608 | - | - | - | - | - | - |
| 11 | .348 | 2.673 | 95.281 | - | - | - | - | - | - |
| 12 | .321 | 2.470 | 97.751 | - | - | - | - | - | - |
| 13 | .292 | 2.249 | 100.000 | - | - | - | - | - | - |

**Table-5**
**Rotated Component Matrix**

| Questions | Component | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| q1 | .722 | .243 | .069 |
| q2 | .763 | .119 | -.013 |
| q3 | .497 | .540 | .086 |
| q4 | .626 | .416 | -.181 |
| q5 | .761 | .195 | .023 |
| q6 | .493 | .514 | .099 |

| q7 | .154 | .834 | -.010 |
|----|------|------|-------|
| q8 | .139 | .805 | .086 |
| q9 | .554 | .465 | -.024 |
| q10 | .454 | .617 | -.107 |
| q11 | .361 | .633 | -.109 |
| q14 | -.032 | -.082 | .866 |
| q15 | .042 | .085 | .874 |

**Table- 6**
**Confirmatory factor analysis results and composite reliability and Chronbach's α**

| Perceived brand age | Items | Factor loading | Composite Reliability | Chronbach's α |
|---|---|---|---|---|
| **Brand Attractiveness** | The brand is cheerful | 0.432 | - | - |
| - | The brand is glamorous | 0.515 | - | - |
| - | The brand is contemporary. | 0.469 | - | - |
| - | The brand is exciting | 0.626 | - | - |
| - | The brand is successful | 0.451 | - | - |
| **Brand Uniqueness** | The brand is daring. | 0.498 | - | - |
| - | The brand is unique. <br> The brand is confident. | 0.606 <br> 0.460 | - | - |
| - | The brand is secure. | 0.511 | - | - |
| - | The brand is upper class. | 0.620 | - | - |
| - | The brand is good-looking. | 0.536 | - | - |
| **Market Roles** | The brand is innovative in the market. | 0.680 | - | - |
| - | The brand is present in the market | 0.512 | - | - |
| **Total value** | - | - | **.677** | **.857** |

## References

1. Guillory M.D., perceived brand age and influence on choice, Diss.Georgia State University**, (2012)**

2. Lehu J.M., Back to life!, Why brands grow old and sometimes die and what managers then do: an exploratory qualitative research put into the French context, *Journal of Marketing Communications,* **10(2**), 133-152 **(2004)**

3. Repease J and Gertner D., An Assessment of the Impact of Perceived Brand Age on Brand Attitudes, *5th Annual American Business Research Conference 6-7 June,* USA**, (2013**)

4. Darpy D. and Levesque A*, The Perceived Brand Age*, **(2003**)

5. Aaker J.L, Brumbaugh A, Grier S., Nontarget Markets and Viewer Distinctiveness: The Impact of Target Marketing on Advertising Attitudes, *Journal of consumer*

*and Psychology,* **9(3),** 127–140 **(2000)**

6. Azoulay A. and Kapferer J.N., Do brand personality scales really measure brand Personality?, *Journal of Brand Management,* **11(2**), 143-155 (**2003**)

7. Fournier S., Consumers and Their Brands: Developing Relationship Theory in Consumer Research, *The Journal of consumer research,* **24(4)**, 343-373 (**1998**)

8. Kotler P., Armstrong G. and Starr R.G, *Principles of marketing* (5ᵗʰ ed.). Englewood Cliffs, NJ: Prentice Hall, (**1991**)

9. Whittler T.E., The effects of actors' race in commercial advertising: Review and Extension, *Journal of Advertising,* **20,** 54–60 (**1989**)

10. Meyers-Levy J., The influence of sex roles on judgment, *Journal of Consumer Research,* **14,** 522–530 (**1989**)

11. Tepper K., The role of labeling processes in elderly consumers' responses to age Segmentation cues, *Journal of Consumer Research,* **20,** 503–520 (**1994**)

12. Williams J.D., Qualls W.J. and Grier S.A., Racially exclusive advertising: Public policy implications for fair housing practices, *Journal of Public Policy and Marketing,* **14,** 225–244 (**1995**)

13. Brumbaugh A.M., Targeting two worlds: The impact of source and other cues on Culture-bound responses to targeted advertising (Working Paper), Cleveland, OH: Case Western Reserve University**, (1997**)

14. Deshpande R. and Stayman D., A tale of two cities: Distinctiveness Theory and advertising effectiveness, *Journal of Marketing Research,* **31,** 57–64 (**1994**)

15. Gronhaug K. and Rostvig L., Target groups and advertising messages, *Journal of Advertising Research,* **18(2)**, 23–28 (**1978**)

16. Whittler T.E. and DiMeo J., Viewers reactions to racial cues in advertising stimuli, *Journal of Advertising Research,* **31(6),** 37–46 (**1991**)

17. Star S.H., Marketing and its discontents, *Harvard Business Review,* (**12**), 148–154 (**1989**)

18. Greco A.J., Representation of the elderly in advertising: Crisis or inconsequence, *Journal of Consumer Marketing,* **6**, 37–44 (**1989**)

19. Lipman J., December 12, Stroh ad campaign spins out of control, *Wall Street Journal,* B6 (**1991**)