
The effects of aging on brand attitude measurement

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Abstract

Memory impairments in the elderly have been widely studied in the past. This study focuses on the effects of these memory impairments on the ability of mature consumers to respond to brand attitude scales. An experimental study investigates the impact of age and type of measurement scale on responses to brand attitude scales. Groups of seniors within the elderly market (55-65, 66-75, and over 75) are investigated as opposed to contrasting two extreme points on the continuum, namely the elderly versus the young. Three commonly used attitude scales were manipulated to determine how age interacts with the form of scale to generate response bias. Three types of response bias; extremity response, acquiescence, and item non-response were investigated. Results indicate a significant interaction between age and type of scale. Implications of these results for those involved in marketing to seniors are highlighted.

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The elderly market is of critical importance to marketers due to its impressive size and economic potential. Seniors are not only the fastest growing demographic segment, projected to number about 70 million by 2030, but also the most affluent group (Day, 1996). Americans over the age of 50 own 77 percent of all financial assets and 50 percent of all discretionary income. As a group, they currently represent more than \$525 billion per year in direct healthcare spending, a figure expected to grow to \$1.1 trillion per year by 2007. Healthier and wealthier, seniors are a force in our economy.

The significant purchasing power of the elderly market has motivated increased attention to their responses to marketing efforts. However, most studies in the extant literature consider only differences between seniors and their younger counterparts (Gilly and Zeithaml, 1985; Cole and Balasubramanian, 1993; Yoon, 1997; Law *et al.*, 1998). Surprisingly, little attention has been devoted to understanding the differences within the elderly market. For example, in two recent studies, the mean age of the younger subjects varied from 19 to 24 and the mean age for the older group ranged from 69 to 72 (Yoon, 1997; Law *et al.*, 1998). Such extreme comparisons tend to mask within group variance and cloud our understanding of the important differences among the elderly that could form the basis of meaningful marketing strategies. The purpose of this study is to investigate whether seniors in different age groups (55-65, 66-75, over 75) differ in their ability to report brand attitudes on attitude scales commonly used in marketing research. Specifically, our goal is to determine if age is a significant factor in accounting for individual differences in responses to different formats of commonly used brand attitude scales.

Conceptual background

There are several explanations for the age-associated deficits in information processing. Recent research proposes that memory performance varies not only as a function of age, but also with external factors (such as incentives/rewards provided) and subject-related factors (such as prior knowledge, motivation, and health) (Yoon, 1997). Based on this view, we propose that the performance of older adults on brand attitude scales differs not only as a function of age but also as a function of the type of scale used (an external



factor). We provide a more rigorous test of this theory by contrasting different age groups within the elderly market rather than contrasting two extreme points on the age continuum (the elderly versus the young).

The effect of memory impairments on attitude measurement

How do memory deficits affect the elderly's ability to respond to commonly used brand attitude scales? The current findings are mixed. Research in information processing and memory demonstrates that older adults' performance in memory tests under certain conditions (such as an information overload) is inferior compared to their younger counterparts (Cole and Houston, 1987; Shiffrin, 1970; Zaretsky and Halberstam, 1968). However, when semantic processing is facilitated or cued, the deficit is found to diminish (Cole and Houston, 1987; Perlmutter, 1979). In attitude research, cues have been provided via instructions from the researcher or in the form of clearly stated labels for scale categories. We propose that in general, older adults' performance on brand attitude scales is facilitated by providing cues with regard to scale points. We focus on three different types of response bias in attitude measurement. They are extremity, acquiescence, and item non-response biases. The following hypotheses are derived based on the above discussion of memory deficits.

Extremity response bias

The first hypothesis examines extremity response or leniency, involving consistent use of endpoints of a scale (which are labeled) as opposed to all points of a scale (which are unlabeled). The under-utilization of unlabeled scale points may be due to a number of reasons. One of the reasons may be age related deterioration of systematic processing skills required to respond to rating scales. Another reason may be the lack of processing resources available to the elderly, which in turn might limit the number of problem-solving strategies utilized to complete a given task. If the meaning of each scale point is not clearly stated, the aging process may affect the reasoning behind how one scale point differs from an adjacent point (Geary and Wiley, 1991; Gibson and Aitkenhead, 1983). We propose measurable differences in elderly responses to attitude scales that provide verbal labels for all scale points compared to the scale that provides only verbal labels for the endpoints. Although both scales are seven-point semantic differential scales that measure brand attitude, it is expected that there is a tendency to over-utilize endpoints as respondents grow older, thereby increasing the instance of extremity response bias. A subject-scale interaction is hypothesized in the experiment.

H1. On a scale with only the endpoints labeled, the use of the labeled endpoints increases with age relative to a scale with all of the points labeled.

Acquiescence bias

Acquiescence is a form of response bias that evidences itself as a tendency to consistently rate objects or attitudes favorably or positively. Acquiescence bias in the elderly is proposed to be due to older people's inclination to exhibit more favorable attitudes and to agree with statements regardless of their content (McPherson, 1983). It has also been shown that performance on tasks that requires a high degree of vigilance deteriorates with age (Phillips and Sternthal, 1977).

H2. On a rating scale with response categories ranging from +3 to -3, the use of the positively marked scale points increases with age, relative to a scale with response categories ranging from 1 to 7.

The second hypothesis suggests that there are measurable differences in responses on a unipolar scale that utilizes all positive scale points compared to a stapel scale, also unipolar, that utilizes both positive and negative scale points. Both scales measure brand attitude and are commonly used rating scales. Specifically, it is expected that as respondents grow older, they will under-utilize negatively labeled scale points regardless of their actual attitudes toward the brand being evaluated, increasing the incidence of acquiescence response bias. This hypothesis also predicts a subject-scale interaction.

Item non-response bias

A form of response bias that is found in almost all survey research involves item non-response. Either questions are left blank or respondents indicate no knowledge of the questions by checking a "no opinion" scale point. Although controversy exists concerning measuring neutral attitudes, some research points to the usefulness of including a "no opinion" category to facilitate those respondents who truly do not have an attitude toward a particular object (Green and Tull, 1978).

Faced with an attitude scale that contains a "no opinion" category, older adults are hypothesized to gravitate toward that point in an effort to avoid complex decision-making. McPherson (1983) reasons that the excessive use of a no opinion scale point by the elderly may be due to their cautiousness in expressing an opinion about something that they do not fully comprehend.

H3. The use of a "no opinion" scale point on an attitude scale increases with age.

Experimental study

An experiment was designed to study the effects of subject, age, and scale type on attitudes toward specific brand benefit claims.

Method

Subjects

Respondents were recruited from various organizations, including church groups, senior centers, and senior housing developments. The sampling frame was limited to seniors who are likely to do their own grocery shopping on a regular basis. Participation was voluntary.

All 302 subjects were provided two incentives to participate in the study. The participants were entered into two raffles. During a break in the experimental procedure, each respondent filled out a raffle ticket, on which he/she indicated a choice between a box of the advertised cereal or \$2.00 in cash if he/she won the raffle. A draw was held immediately after collecting the raffle tickets.

Another draw was held after the completion of data collection. Three cash prizes of \$40, \$20, and \$10 were awarded. Winners were notified by telephone. Both raffles were explained at the beginning of each session.

Experimental procedure

Subjects were assessed in small groups at locations convenient to them. Size of the groups varied, but no group was larger than 30 people. A total of 14 sessions were held over a three-month period. Two trained administrators conducted the experiments. Sign-up sheets explaining the experiment were posted in various locations one week in advance of the date of the experimental sessions. At the beginning of each session, the administrator explained how important the opinions of mature consumers are to advertisers and marketing researchers. Subjects were told that they were going to be asked some questions about a brand of cereal. An overview of the experiment was then presented. Instructions were given at the beginning of each session and were also included with the test materials. The administrator was available during the sessions to answer questions.

Stimulus materials

The stimulus used in this study was an advertisement for a popular brand of breakfast cereal, a product frequently purchased by mature consumers. A laminated, color photocopy of a currently running ad for Post Fruit & Fibre cereal was given to each respondent. Subjects were exposed to the advertisement along with the test booklet and were able to view the ad at their own pace. After initial exposure, subjects completed a set of evaluative measures. The first of each pair of

the three sets of scales was presented in this section (for example, all points labeled), along with demographic questions. At this point, the first section of the questionnaire was collected and the first drawing was held. The second section consisted of the second of each pair of the three sets of scales (for example, only endpoints labeled). The order of measures in the test booklet followed the recommendations by Rossiter and Percy (1997) on ad testing procedures. Category use, purchase intention, global brand attitude, and brand attitude benefit beliefs were assessed in that order. The order of presentation of the two sections of the instrument was rotated within each session. The instrument was pre-tested to determine the efficacy of the instrument itself and to assess reliability and validity of the measures.

Measures

Purchase intention. Purchase intention was assessed first with a standard, five-point purchase intention scale for the purpose of testing the validity of the attitude toward the brand scales. Purchase intention was only measured to act as a validity check for the attitude scales. It was not part of the main experiment.

Brand attitude benefit claims. In an effort to improve realism, the benefit claims comprising the brand attitude scales were taken from a current print advertisement. Since approximately three salient attributes are shown to be sufficient indices of the cognitive structure for brand attitude (Olson and Muderisoglu, 1979; Ryan and Etzel, 1976), three benefit claims (salient attributes) were elicited from the advertisement for the cereal: nutrition, taste, and value. Three items reflecting the nutrition, taste, and value of the cereal made up the brand attitude scale (see Appendix). Although the experiment was set up to be as rigorous as possible, its main focus was not assessing the attitude itself, but evaluating responses to the measurements.

Pilot test

A pilot test was administered to 60 mature consumers. The order of the scales in the experimental booklet was varied and the pilot test was used to determine if the order of appearance had any effect on the results. The pilot was also used to measure the reliability and validity of the scales used in the study. Common factor analysis of all scales identified three distinct factors: nutrition, taste, and value with three items each. These factors accounted for 88.5 percent of the common factor variance in the factor structure.

The reliability of the three factors was satisfactory at nutrition $\alpha = 0.92$, taste $\alpha = 0.96$, and value $\alpha = 0.93$, respectively. Finally, two possible covariates were assessed. There is some

support in the literature for including years of education as an indicator of cohort because more educated adults supposedly perform better on tests involving cognitive processing. In addition, familiarity with the brand being assessed was included. Neither was significant in the model.

Independent factors

Subject. Each respondent in the experiment was assigned a numerical identification code to allow for within subjects effects to be measured. In the model, subject, a random factor, is nested within the age factor.

Age. For the purposes of this study, chronological age was deemed to be appropriate. Three groups of mature respondents represented three levels of age: Age 1: 55 to 65, Age 2: 66 to 75, and Age 3: over 75. Age is a fixed factor.

Scale type. Three different types of evaluative scales were used to test the research hypotheses. The scale that tested the extremity response bias consisted of a seven-point semantic differential, all points labeled and another seven-point semantic differential, with only the endpoints labeled. The scale that tested the acquiescence response bias consisted of a unipolar, seven-point scale with values ranging from 1 to 7 and a unipolar, seven-point scale with values ranging from -3 to $+3$ (a Stapel scale). The scale that tested the item non-response bias consisted of a seven-point semantic differential, only the endpoints labeled, plus a “no opinion” category. Sample scale items are included in the Appendix.

Dependent measure

A dependent variable that measured the effects of subject, age, and type of scale on respondents' ability to report attitudes toward specific brand benefit claims was created. Since each of the three rating scales differed in format from each other, the dependent measure had to capture the differences in the scale format. Root average squared deviations were calculated for each pair of the extremity response and acquiescence bias scales. The root average squared deviations measure the distance from each respondent's score to the end point of the scale. For example, to test extremity response bias, a dependent variable measuring the distance from each respondent's score to the labeled end point was calculated. The experiment examines the effect of removing the labels from all but the endpoints of an attitude scale. If neither the format of the scale nor the respondent's age has any effect, the responses to both scales should be identical. Using the same scale (all points labeled) as a reference for both calculations allows a “benchmark” that illustrates the drift toward the end points on the only end points labeled scale. It is hypothesized that the

dependent variable will decrease as age increases because older people tend to use the endpoints more if they are the only labeled points on the scale. The dependent measure was called “brand attitude”.

Extremity response bias. In order to assess the interaction between age and scale type, two forms of a common rating scale were used; one with all points labeled and one with only the end points labeled. As discussed earlier, the dependent variable, “brand attitude”, is expected to decrease as age increases.

Acquiescence. It is hypothesized that the dependent variable will decrease as age increases because older people will under-utilize negatively labeled scale points and over-utilize the positively labeled ones.

Item non-response. To examine the effect of item non-response, the drift to the “no opinion” point, when it is present, has to be measured. It is predicted that the older people will over-utilize a “no opinion” point (when present), regardless of whether or not they have an opinion. Proportion of respondents selecting the “no opinion” scale point served as the dependent variable.

Subjects were categorized into three age groups and all subjects responded to all types of scales. In other words, all respondents evaluated brand attitudes on both pairs of the labeling and positive/negative scales, as well as the no opinion scale. The research utilized a split plot design with subject nested within age, and with age (three levels) and scale (two levels) as crossed factors.

Results

The influence of age on brand attitude

The first hypothesis tests the extremity response bias due to labeling. An ANOVA resulted in the predicted interaction between age and the type of scale ($F = 4.16, p < 0.01$), demonstrating that both the age of the respondent and the scale that is being used impact the response to the scale. The differences in age groups varied in both magnitude and direction. Scale B (only endpoints labeled) has a higher dependent measure score for respondents in Age 1 (1.54), but this score is lower for Age 2 (1.00) and Age 3 (0.48) respondents. It was expected that the adjusted mean of the dependent measure would be lower for all three age groups on Scale B (only endpoints labeled) compared to Scale A (all points labeled). With the exception of the youngest group, this expectation was confirmed (Table I). As hypothesized, the means of the dependent variable decreased with each successively older age group for the individual scales.

For each successively older age group, brand attitude decreased, demonstrating the older

Table I Mean dependent measure scores by age group

	Age group ^a		
	1 (n = 105)	2 (n = 108)	3 (n = 89)
<i>Type of response bias – extremity</i>			
Scale A ^b	1.48	1.27	0.93
Scale B ^c	1.54	1.00	0.48
<i>Type of response bias – acquiescence</i>			
Scale A ^d	2.34	2.20	1.54
Scale B ^e	2.05	1.39	0.63

Notes: ^aAge group 1 = 55-65; 2 = 66-75; 3 = over 75;
^bAll points labeled; ^cOnly endpoints labeled; ^dUnipolar, 1 to 7;
^eUnipolar, -3 to +3; Note that lower scores on dependent measure represent more positive responses

respondents' tendency to choose the labeled endpoints of the attitude scale. *Post hoc* analysis of variance revealed marginal differences between scales for age group two (Age 2: $F = 2.90$, $p < 0.09$) and significant differences for age group three (Age 3: $F = 7.75$, $p < 0.01$). An examination of the frequency distributions for both forms of the scale revealed that respondents rate the brand differently depending on the format of the scale presented to them. The differences are more apparent for Scale B, which includes verbal labels only at the end points of the scale. Using the "7" category as an example, on Scale A (all points labeled) frequencies ranged from 10 percent to 33 percent for age groups 1 to 3. On the other hand, on Scale B (only endpoints labeled), the "7" responses for the three age groups ranged from 19 percent to almost 80 percent. The results support a clear gravitation to the end points when the older respondents (especially in age group 3) are presented with the end points only labeled scale.

H2 pertains to testing acquiescence bias and predicts that on a rating scale with response categories ranging from -3 to +3 (Scale B), the use of the positively marked scale points increases with each successively older group of respondents, relative to a scale with response categories ranging from 1 to 7 (Scale A). An analysis of variance was performed to test this hypothesis. As predicted, significant interactions emerged between age and the type of scale ($F = 6.73$, $p < 0.01$). The mean dependent measure for Scale A decreased for each successive age group (Age 1: 2.34, Age 2: 2.20, Age 3: 1.54). A similar pattern was obtained for Scale B. With each successively older group of respondents, brand attitude was smaller, indicating that older respondents tend to move toward the positively marked scale points and to stay away from negative numbers (Table I). *Post hoc* analysis of variance revealed significant differences between scales for age groups two and

three (Age 2: $F = 11.92$, $p < 0.01$ and Age 3: $F = 13.67$, $p < 0.01$).

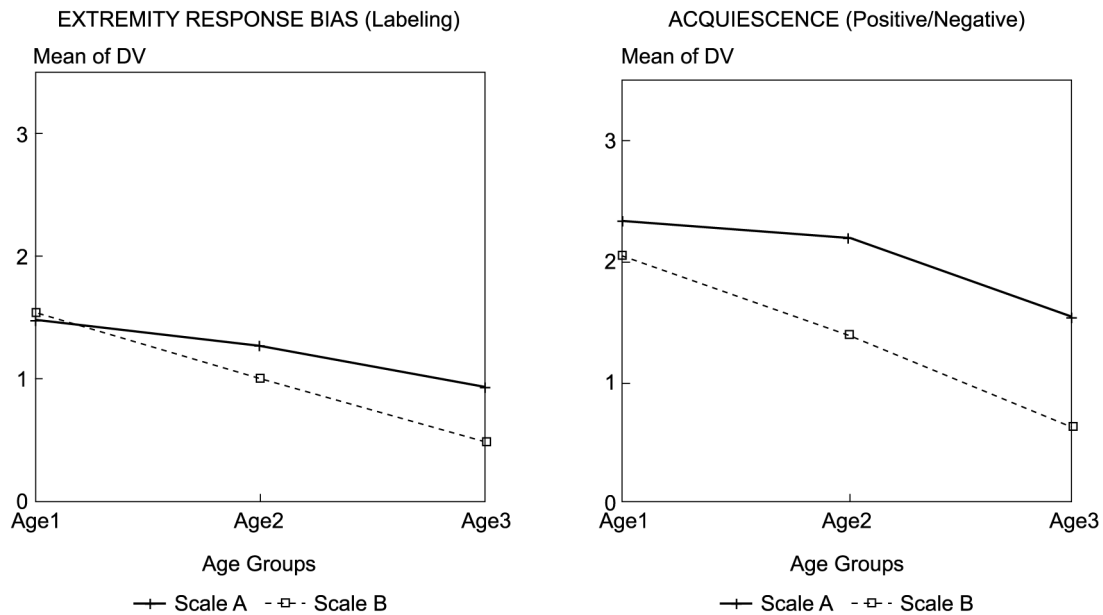
Frequency distributions for the two forms of the scale revealed that differences do exist among the three age groups of respondents (Figure 1). The differences are apparent for both forms of scale (A and B), but are more dramatic for Scale B, which has response categories ranging from -3 to +3. On Scale A, the "7" category shows a range of response frequencies for the three age groups from 12 percent to 50 percent, whereas on Scale B, the "7" response frequencies range from 18 percent to almost 70 percent for age groups 1 to 3. The results clearly indicate that age should be considered as a major influence in the way people respond to these two specific scale formats.

H3 tested item non-response bias or a preference for a "no opinion" category. Specifically, it was predicted that the use of a "no opinion" scale point increases with each successively older group of respondents. An ANOVA of proportions of "no opinion" responses across the three age groups was performed to test this hypothesis. The proportions were subjected to an arc-sine transformation to achieve scores with improved normality and homogeneity of variance characteristics (Milligan, 1987). As predicted, the proportions significantly decreased ($F = 45.07$, $p < 0.001$) for each successive age group (Age 1: 0.07, Age 2: 0.21, Age 3: 0.52). *Post hoc* analysis revealed that there are significant differences in proportions of "no opinion" between age groups one and two ($F = 7.49$, $p < 0.01$) and between age groups two and three ($F = 19.27$, $p < 0.001$).

The frequency distributions for the two forms of the scale were examined for differences. For Scale A, which contains a "no opinion" category, the frequency for response "7" ranges from 12 percent to 50 percent for the three age groups. For Scale B, which does not contain a "no opinion" category, the frequency of "7" responses ranges from 18 percent to 70 percent for age groups 1 to 3. The lower proportions of response for "7" responses on Scale A are attributed to the shift to the "no opinion" response category. In summary, the results indicate that both age and scale had an effect on the way respondents rated a brand on commonly used attitude scale formats.

Summary and discussion

Several intriguing findings emerge from this research. Of central importance is the finding that older respondents differ in their ability to respond to commonly used attitude scales in marketing research. A comparison of mean differences

Figure 1 The effects of age and scale format on response bias

among groups of young and elderly, commonly seen in previous studies, could have masked these differences and limited our knowledge of elderly attitudes towards brands.

Differences between the two forms of the scale testing extremity response bias show a higher mean brand attitude for the scale that has only its endpoints labeled compared to all points labeled ($t = 4.05, p < 0.01$). In addition, the means for the scales testing acquiescence are significantly different ($t = 8.20, p < 0.01$), demonstrating the respondents tendency to report more favorable brand attitudes when using a scale with points ranging from -3 to $+3$ (as compared to a scale from 1 to 7).

In general, response bias increased with the age of the respondent. In all cases except for the youngest group using the extremity response scales, there are significant differences between the means for pairs of scale formats by age. Age group two reported attitudes that are more favorable on both extremity response and acquiescence. For the extremity response scales, the middle age group was more favorable to a scale with only the endpoints labeled. For acquiescence, more favorable ratings were obtained for a scale with points ranging from -3 to $+3$. The oldest group of respondents reported results similar to the middle group. They reported more favorable attitudes using a scale with only endpoints labeled and a scale with points ranging from -3 to $+3$.

In general, the results indicate that the youngest group of respondents probably report equally valid

results using either of the pairs of scales in the experiment. Consequently, for the youngest group, either of the scale formats is appropriate. For Age 2 and Age 3 groups, it may be appropriate to use scales with all points labeled, with only positive values for the scale points, and with a “no opinion” point. Figure 1 presents a graphical illustration of the differences in scales for each age group.

Age group one, the youngest of the respondents, did not exhibit any response bias in our study. This result may be due to the availability of processing resources to this group. This finding merits a re-examination of the definition of elderly that is currently debated in the literature. The finding that the 55-65 age group did not display any decline in processing resources may suggest that this group should not be categorized as elderly. A number of issues related to aging and information processing await future research attention. For example, do elderly consumers' propensity to depend on schematic processing, as opposed to detailed processing, affect their responses to measurement scales? If yes, to what extent and what strategy can be used to reduce this bias? Since elderly consumers are known to rate brands positively, what effects do measurement biases have on branding research? This question is especially important for brands that have recently ventured into the marketplace, since such bias might have important implications for forecasting and market planning.

Implications

The results of this study have several implications for marketing managers. Some specific suggestions based on the present research findings are summarized below.

Label all points of the scale

The results suggest that mature consumers will benefit from verbal cues in the form of category labels on attitude scales. This research shows that if only the endpoints of a scale are labeled, older people tend to over-choose those two categories. Specifically, the use of the labeled endpoints increased with each successively older group of respondents. For example, Age Group 2 respondents (66 to 75 years old) used the labeled endpoints more often than did the youngest group of respondents (55 - 65 years old). Age Group 3 respondents (over 75) used the end points more often than the other two groups.

An over-utilization of scale points simply because of the format of the scale poses problems for the validity of the scale. Labeling all scale points should eliminate the over-utilization of the endpoints that occurs more often with increasing age.

Use a rating scale with all positive numbers for the scale categories

Older consumers have a general tendency to rate brands favorably and not to utilize scale categories marked with negative numbers. The common rating scale, ranging from a -3 to a +3, for example, is not an appropriate scale when the target population is mature consumers. This research shows that the older the respondent, the less frequently he/she utilizes a negatively marked scale point, thus over-utilizing the positively marked points and reporting more favorable attitudes than with a simple 1 to 7 scale.

For each successively older group of respondents in this research, the use of negatively labeled scale point decreased. For example, the oldest group of respondents (over 75) used the positively labeled scale points more often than did the middle group of respondents (66-75 years old) and the youngest group of respondents (55-65 years old). The under-utilization of these categories may invalidate the research results. Using a simple five- or seven-point rating scale, with all positive numbers for the scale categories, will bypass the problem that negatively labeled scale points presents.

Carefully weigh the benefits of using the “no opinion” category

The use of a “no opinion” point increases dramatically for older respondents. The debate about whether people should be allowed a “no opinion” choice when reporting their attitude continues in the literature. The current research indicates that if there is no “no opinion” category, respondents will mark an opinion point on the scale. In those situations, the researcher cannot determine the difference between no opinions and attitudes. Our results show that older consumers tend to over-utilize the “no opinion” point. When presented with identical measurement scales, the only difference being one had a “no opinion” point, respondents did not use the neutral point as often as they used the “no opinion” point. Age Group 3 respondents (over 75) used the “no opinion” point more frequently than did Age Group 2 respondents (66-75 years old), and Age Group 2 respondents used it more frequently than did Age Group 1 respondents (55-65 years old). Although the presence of a “no opinion” category is controversial in the literature, this response category eliminates a good deal of item non-response bias. The cautiousness that comes with increasing age, as well as the tendency to please the researcher (acquiescence), may both account for the over-utilization of the “no opinion” category. Researchers should carefully weigh the benefits of using the no opinion category that allows older respondents to choose an obvious position of neutrality if they are truly neutral.

Limitations and future research directions

The use of a judgment sample and the artificiality imposed by an experimental design are sources of caution about the interpretation of the results. This study needs to be replicated with different populations of senior adults, as well as with different product categories. A product category that is controversial and possibly engenders some more negative or less favorable attitudes from some respondents (for example, smoking) may have better demonstrated the differences among various response biases.

Future research directions include the effect of social approval and social isolation on response bias as well as the effect of other measures of age, such as cognitive age, on brand attitude responses. This study contributes to the research on aging and to research investigating the decline in cognitive abilities that comes with age. Only mature consumers (55 and over) were included in the sample studied to see how the aging process affects the cognitive processes involved in

reporting brand attitudes on common measurement scales. It is hoped that the present study motivates further research into an understanding of intra-generational effects on other marketing variables of interest, such as communication effectiveness and attitudes toward new products.

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Further reading

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(The Appendix follows overleaf.)

Appendix

Figure A1 Sample study measures

Extremity Response Bias: All categories labelled

Post Fruit & Fibre cereal is:

Extremely Low in Fibre	Very Low in Fibre	Somewhat High in Fibre	Neither Low Nor High in Fibre	Somewhat High in Fibre	Very High in Fibre	Extremely High in Fibre
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Extremity Response Bias: Only endpoints labelled

Post Fruit & Fibre cereal is:

Extremely Low in Nutrition						Extremely High in Nutrition
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Acquiescence Bias: Both Positive and Negative scale points

On a scale from -3 to +3, where +3 is the best score, please rate Fruit & Fibre cereal on each of the three following characteristics of cereal:

Sweetness	-3	-2	-1	0	+1	+2	+3
Taste	-3	-2	-1	0	+1	+2	+3
Crispness	-3	-2	-1	0	+1	+2	+3

Acquiescence Bias: Only positive scale points

On a scale from 1 to 7, where 7 is the best score, please rate Fruit & Fibre cereal on each of the three following characteristics of cereal:

Sweetness	1	2	3	4	5	6	7
Taste	1	2	3	4	5	6	7
Crispness	1	2	3	4	5	6	7

Item Non-Response Bias: With a no opinion category

Post Fruit & Fibre cereal is:

Extremely Inexpensive						Extremely Expensive	No Opinion
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Item Non-Response Bias: Without a no opinion category

Post Fruit & Fibre cereal is:

Extremely Inexpensive						Extremely Expensive
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Executive summary and implications for managers and executives

This summary has been provided to allow managers and executives a rapid appreciation of the content of this article. Those with a particular interest in the topic covered may then read the article in toto to take advantage of the more comprehensive description of the research undertaken and its results to get the full benefit of the material present.

To understand older markets we must alter the way we research

Today's generation of over-50s are, in the main, pretty well-off in terms of income and assets. As such this group represents a significant market for businesses in the USA and other developed nations. Marketers need to adapt strategies and

tactics to respond to the attitudes, preferences and behaviour of older people – for many of us failure to do this will reduce our opportunity and provide a considerable threat to future profitability.

One of our failings as marketers is to see older people as one homogeneous group rather than as a vast market containing the same variations, nuances and range of behaviour as we expect from younger people. Just as with the rest of us, older people vary by demographics (income, education, social class, etc.), psychology and behaviour. And as we read here, we need to recognise that there is a world of difference between some of 50 and some one of 85. To expect a similar response simply because we have bracketed the two together as “older people” would be very foolish.

Given these differences and the extent to which the market of older people varies, it is essential that marketers address the issues surrounding the conduct of market research targeted at groups of

older people. And, in examining how we conduct research among older people, we should consider whether there are factors that change the way in which individuals respond to questioning as they grow older. If our research contains response bias because of the manner in which older people respond, we should, at the very least be aware of this fact and should probably make changes to the nature and style of the questioning we undertake.

Selecting extremes – conservatism or confusion?

Jayanti, McManamon and Whipple examine the effects of getting older on the measurement of brand attitudes and, in particular, whether different presentation of scales generates different responses. The central finding is that “. . . older respondents differ in their ability to respond to commonly used attitude scales in marketing research”. The two factors that seem to significantly affect response are first the labeling of all points on the scale or just the two extremes; second the use of negative numbers in the labeling of scales.

In the case of the labeling of end points, it would appear that the older people get the more likely they are to opt for an extreme position. It would seem logical to make the assumption that this type of response variation results from confusion or misunderstanding rather than people becoming more polemical as they age. The authors recommend that researchers should label all the scale points in a research question helping to eliminate “. . . the overutilisation of the end points that occurs more often with increasing age”.

In the case of positive versus positive/negative rating scales, older people seem to prefer giving a positive rating to brands which results, in the latter case, in a skewed response. Marketers, under such circumstances, are using information indicating a positive view of the brand that may not truly reflect real brand attitudes.

Forcing an opinion out of the respondent

The debate about providing or not providing a “no opinion” or “don’t know” option in research extends beyond research among older people. On one level such an option seems right since the respondent may not have a genuine opinion about the brand. However, such an option tends to measure levels of brand awareness rather than attitudes towards the brand.

For older people, the incidence of choosing the “no opinion” option increases reflecting either a desire not to offend or else a degree of reserve about the expression of opinion. As the authors point out here, there is a need to make the distinction between true neutrality and not having an opinion. We might also note that, by using only positive scales this problem is avoided (to a certain extent) by the “neither for or against” position being assigned a positive value.

It is for researchers to judge whether the “no opinion” option is required but we should consider how we structure questions so as to avoid giving the respondent too many opportunities to “cop out” of giving an opinion. This is especially important where those being researched are aware of the brand and it is relevant to their circumstances.

More work is needed on how to best research the opinions and attitudes of older people. The research here demonstrates that the assumptions about the structuring of research questions do not always hold – towards the end of our lives our manner of responding and approach changes significantly. If we are to understand how an important segment of the population (and growing still more important every day) responds to brand messages, we have to design research that really elicits the thoughts and feelings of older people.

(A précis of the article “The effects of aging on brand attitude measurement”. Supplied by Marketing Consultants for Emerald.)