

# Does Race/Ethnicity Affect Aging Anxiety in American Baby Boomers?

Research on Aging

33(4) 361–378

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DOI: 10.1177/0164027511403009

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## Abstract

The purpose of this study was to examine whether racial/ethnic differences in aging anxiety among American baby boomers stem from socioeconomic resources, knowledge about aging, and/or exposure to older adults. Data were from the Images of Aging Survey conducted in 2004. The analysis included 362 non-Hispanic Whites, 117 African Americans, and 96 Hispanics. Multiple regression models were used. Aging anxiety did not differ between African Americans and non-Hispanic Whites. Hispanics tended to have more aging anxiety than non-Hispanic Whites, but this difference was explained by relatively low socioeconomic status and lack of knowledge of aging among Hispanics. Baby boomers who were older, less healthy, less educated, and poorer had more aging anxiety than their counterparts, as did those with less knowledge about aging and less contact with older adults. To reduce aging anxiety, public interventions are needed that promote accurate perceptions about aging and increase opportunities for interacting with older adults.

## Keywords

aging anxiety, baby boomers, race/ethnicity

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## Introduction

A nexus of rapid population aging and growing ethnic diversity is reshaping the demographic landscape of the United States (Torres-Gil 2005). Over the next three decades the aging of the U.S. population will accelerate with the entry of 80 million baby boomers—those born between 1946 and 1964—into the ranks of the older population (Gassoumis et al. 2010). By 2030, nearly one in five U.S. residents is expected to be 65 and older (U.S. Census Bureau 2008b). Simultaneously, the United States is becoming increasingly diverse in its ethnic composition. Racial and ethnic minorities are expected to make up half the U.S. population by 2050, with Hispanics accounting for 30%, African Americans 15%, and Asian Americans 9.2% (U.S. Census Bureau 2008b).

As baby boomers begin to enter retirement, it is important, given their prolific numbers, to explore their fears or anxieties about aging to better understand their adaptation to the aging process. Furthermore, as a generation that will bring unprecedented ethnic diversity to the ranks of the older population, it is instructive to consider how racial and ethnic minorities anticipate their future aging selves. American society has been described as reinforcing stereotypic and negative perceptions of older adults (Busse 1968; Bytheway 2005). The majority of older people reported at least one event in which they encountered ageism (Cummings, Kropf, and DeWeaver 2000; Gellis, Sherman, and Lawrence 2003), a prejudice and discrimination against a particular age group, and especially the elderly (Butler 1975). Negative perceptions or beliefs about aging have been demonstrated to be detrimental on a variety of health outcomes, including mental and functional well-being, among both older adults (Levy 1996; Levy et al. 2008) and those in middle age (Hill and Leonard 1994; Levy et al. 2002; Yun and Lachman 2006). In this study, we examine the racial and ethnic differences in aging anxiety among American baby boomers.

Worries about the future that result from perceived problems of old age are known as aging anxiety (Cummings et al. 2000; Eglit 2004; Lynch 2000; Palmore 1990). Existing studies suggest that aging anxiety contributes to death anxiety (Benton, Christopher, and Walter 2007). However, aging anxiety is distinct from death anxiety, which focuses exclusively on death concerns (Lynch 2000). Aging anxiety—based on both negative misperceptions and legitimate concerns—appears to peak at middle age, roughly between the ages of 40 and 50 (Kruger 1994), or between 50 and 64 (Ross and Drentea 1998). While African Americans and Hispanics tend to report greater aging

anxiety than non-Hispanic Whites (Abramson and Silverstein 2006; Lynch 2000), less is known about the conditions responsible for these differences, particularly in a cohort for whom the transition into old age is currently most relevant: the baby boomers.

The higher aging anxiety found in minority groups may be due to the effects of both race and age, a double jeopardy status. Older adults of color may suffer not only from prejudices, stereotypes, and discrimination associated with old age, but may also be burdened by their racial minority group status (Markides 1983). Inequalities based on race exist across the life span (Ferraro and Farmer 1996). Thus, fear of old age may be more acute in minority groups because of systematic lifelong disadvantages. In this study, we examine whether any race or ethnic variation in aging anxiety stems from differences in personal circumstances, including socioeconomic status, knowledge about aging, and exposure to older adults in daily life. We also explore the role of race/ethnicity in these circumstances.

Cumulative disadvantage theory suggests that a lifetime of low socioeconomic status accelerates the occurrence of adverse conditions and events with aging (O'Rand 1996). Therefore, concerns about the ability to handle losses, support oneself financially, and access appropriate health care in old age may be particularly acute for those with few economic resources (Dannefer 2003), causing them to anticipate a problematic old age.

Aging anxiety may also stem from lack of factual knowledge about the process of aging (Doka 1986). The pervasive stereotypic and negative perceptions of older adults in the American society (Cuddy, Norton, and Fiske 2005; Palmore 2001) could lead to misinformation and misperceptions about older people and the aging process. Lynch (2000) and Cummings and colleagues (2000) found that having accurate knowledge about aging processes and older adults correlated inversely with aging anxiety, implying that accurately comprehending the realities of aging may assuage fears about the future. Since African Americans and Hispanics tend to have lower income and less education than non-Hispanic Whites (U.S. Census Bureau 2008a, 2009), it is reasonable to expect that minority baby boomers will have greater aging anxiety than Whites.

The intergroup contact hypothesis states that contact between groups under optimal conditions could effectively reduce intergroup prejudice (Allport 1954). The contact effects hold equally well for age groups and go beyond the original focus on racial and ethnic groups (Pettigrew and Tropp 2006). In cross-age settings, exposure to older adults has been found to alleviate aging anxiety (Kafer et al. 1980). Lasher and Faulkender (1993) found

that individuals with more frequent contact with older adults reported less anxiety about anticipated changes in their physical appearance, loss of loved ones, declines in health, and reductions in financial well-being due to aging. Exposure to elders in the family also shapes attitudes toward the aging process; for example, contact with grandparents contributed to positive attitudes about aging and lessened fear of growing old (McGuinn and Mosher-Ashley 2002). To the degree that contact with older adults in daily life serves as a corrective to overtly negative stereotypes of older adults (e.g., those found in the media), interacting with older people can be expected to reduce anxiety about aging. Given the stronger familistic cultures in minority communities (Himes, Hogan, and Eggebeen 1996) and higher intergenerational coresidence (Angel, Angel, and Himes 1992; Himes et al. 1996), we expected that Hispanics and African Americans would experience greater age integration than Whites, serving to reduce their aging anxiety.

Building on theories of double jeopardy, cumulative disadvantage, ageism and age stereotypes, and intergroup contact, we tested the following hypotheses in this investigation:

*Hypothesis 1:* Minority baby boomers (Hispanics and African Americans) will have greater aging anxiety compared to non-Hispanic Whites.

*Hypothesis 2:* Baby boomers with less education and lower income will experience greater aging anxiety than those with more of such resources.

*Hypothesis 3:* Baby boomers with less factual knowledge about aging will experience greater aging anxiety than those with more knowledge.

*Hypothesis 4:* Baby boomers with relatively less contacts with older adults will have greater aging anxiety than those with more contacts.

*Hypothesis 5:* Controlling for resources, knowledge, and exposure will modify the difference in aging anxiety between the two minority groups and White non-Hispanics: Resources and knowledge will reduce race/ethnic differences, and contacts with older adults—acting as a suppressor—will increase race/ethnic differences.

In addition to unique effects tested in Hypotheses 1 through 5, we also tested interaction effects, such that

*Hypothesis 6:* There will be interaction effects of race/ethnicity on resources, knowledge, and exposure.

## Method

### *Sample and Data*

Data used for this study were from the Images of Aging Survey, a joint project of the University of Southern California and AARP, conducted in 2004. The sample consisted of 1,594 adults 18 years of age and older, including a core sample of 1,202 and two targeted oversamples of 222 African Americans and 170 Hispanics. Respondents were identified in households that were selected by random digit dialing of residential locations in the continental United States. One adult per household was chosen to participate; in households in which several adults resided, residents whose birthdays were closest to the interview date were selected. Telephone numbers used for the targeted oversamples were drawn from areas of the country in which 30% or more of the population was African American or Hispanic. Surveys were conducted in Spanish upon request. The main purpose of the study was to explore images, perceptions, and attitudes that Americans have toward aging and the older population (Silverstein and Abramson 2008).

The purpose of the present study was to examine the effect of race/ethnicity on age anxiety among middle-aged adults, specifically baby boomers. Therefore, the analysis was restricted to 575 adults (362 non-Hispanic Whites, 117 African Americans, and 96 Hispanics) born between 1946 and 1964, and who at the time of the survey were 40 to 58 years of age. We omitted a small number of non-Hispanic respondents ( $n = 19$ ) who reported their race as other than White or African American. To adjust for nonresponse and ensure that this subsample reflected a national profile, we used data from the 2002 Current Population Survey to construct sample weights based on age, gender, educational attainment, race, and Hispanic origin (U.S. Census Bureau 2004).

### *Dependent Variable*

Aging anxiety is measured by the Kafer Aging Anxiety Scale (KAS), a 13-item subscale of the Aging Opinion Survey (Kafer et al. 1980). The KAS consists of a series of statements about particular worries and anticipated circumstances related to old age. Respondents are asked whether they agree or disagree with each statement. Factor analysis indicated that only 6 of the 13 items formed a factor sufficiently cohesive to be labeled *aging anxiety*—confirming the unidimensional measurement model developed by Lynch (2000) with the same items in a different data set. The 6 items reflect the following anxiety domains (statements in parentheses): (1) physical appearance

(I always worried about the day I would look into the mirror and see gray hairs), (2) physical health (The older I become, the more I worry about my health), (3) general anxiety about the future (The older I become, the more anxious I am about the future), (4) financial dependence (The older I become, the more I worry about money matters), (5) physical disability/mobility (I worry about not being able to get around on my own when I'm older), and (6) loss of cognitive ability or autonomy to make decisions (I worry that people will have to make decisions for me when I am older). All the items were scored on a 4-point Likert rating with responses ranging from 1 = *strongly disagree* to 4 = *strongly agree*. We constructed an additive scale from 6 six items ranging from 6 to 24, with higher value indicating stronger aging anxiety. Cronbach's alpha for the 6 items was .77.

### *Independent Variables*

Race/ethnicity was measured with two dummy variables for African Americans (=1) and Hispanics (=1) (reference = White non-Hispanics and others). Socioeconomic status was measured by education and yearly household income separately. Education was measured with three dummy variables: high school or less, some college, and college graduate or more. There were 58 respondents (10.09%) who did not report their incomes. We imputed their missing values for income by matching the response patterns of persons with complete data to persons with missing data. Income was then operationalized with three dummy variables: less than \$35,000, \$35,000 to \$75,000, and more than \$75,000. To control for any systematic bias resulting from the imputation, we also include a dummy variable for whether income was missing/imputed (=1) or valid/reported (=0).

Knowledge of aging was measured with Palmore's Facts-on-Aging-Quiz (FAQ), a 25-item true-false quiz that tests general knowledge about physical, mental, social, and economic aspects of aging (Palmore 1977, 1988). The FAQ includes statements related to incorrect negative understanding of older adults (e.g., "The majority of older people are senile"), correct negative statements of aging (e.g., "All five senses tend to decline in old age"), and correct positive perceptions about older adults (e.g., "The majority of older people say they are seldom bored"). We computed a single score represented as the number of correct responses ranging from 0 to 25. The mean score for the sample was 14.1 ( $SD = 3.1$ ). Cronbach's alpha for the 25 items was .46.

To ascertain exposure to older adults in daily life, respondents were asked how often they talked to or got together with anyone age 65 or older (other

than a spouse), from which we constructed a dummy variable (1 = weekly or greater contact; 0 = less than weekly contact).

To control for factors that may confound the relationship between race/ethnicity and aging anxiety, the following covariates were controlled: age (in years), gender (1 = female, 0 = male), marital status (1 = married, 0 = not married), and self-rated health (1 = excellent or good, 0=fair or poor).

### *Statistical Analysis*

We first examined descriptive statistics for all study variables in the full sample and separately by racial/ethnic groups and tested bivariate associations between race/ethnicity and other explanatory variables (chi-square tests for nominal variables and *t* tests and ANOVAs for continuous variables). Pearson's correlations were performed on all independent and dependent variables to make sure there is no evidence of multicollinearity (determined as a correlation > 0.6). Next, we tested bivariate differences in aging anxiety across race/ethnic groups and across categories of mediating variables. Finally, we conducted multiple regression analyses to identify factors uniquely associated with aging anxiety and assess whether education, income, knowledge about aging, and exposure to older adults moderates race/ethnic differences. The interaction effects of racial/ethnic groups on income, knowledge of age, and contacts with older adults were assessed separately. All statistical analyses were conducted using SAS, version 9.1 (SAS Institute Inc., Cary, NC).

### **Results**

Table 1 presents characteristics of this sample of baby boomers based on unweighted data. The mean age of the sample was 49 years ( $SD = 5.4$ ). Due to the oversampling of minorities, African Americans represented 20% of the sample and Hispanics 17%. The percentage distributions reveal that 59% of the sample was female, 62% was married, four in five (79%) reported being in excellent or good health, and one third (33%) graduated from college. In terms of income distribution, 31% of the sample had incomes below \$35,000 per year, 29% had between \$35,000 and \$75,000, and 30% were over \$75,000. Four out of five respondents (79%) had at least weekly contact with older people. The sample averaged 14 correct in the Facts-on-Aging Quiz, for an average grade of 56%. The mean score of the aging anxiety for the sample was 15.4 ( $SD = 4.8$ ) (see Table 2).

Several significant associations were observed between race/ethnicity and other characteristics. As shown in Table 1, compared to African American

**Table 1.** Characteristics of Baby Boomers (40 to 58 years) in AARP Images of Aging Study, 2004, Total and by Race/Ethnicity

	Total sample (n = 575)		Non-Hispanic White (n = 362)		African American (n = 117)		Hispanic (n = 96)	
	%		%		%		%	
Independent variables								
Gender								
Male	40.52		40.33		35.04		47.92	
Female	59.48		59.67		64.96		52.08	
Marital status								
Married	61.61		68.70		36.75		65.26***	
Not married	38.39		31.30		63.25		34.74	
Self-rated health								
Fair or poor	20.84		15.24		30.17		30.85***	
Excellent or good	79.16		84.76		69.83		69.15	
Education								
High school or less	38.46		33.70		41.88		52.08***	
Some college	29.02		26.46		35.90		30.21	
College graduate or more	32.52		39.83		22.22		17.71	
Household income								
Less than \$35,000	30.96		24.03		50.43		33.33***	
\$35,000 to less than \$75,000	29.39		28.73		29.06		32.29	
\$75,000 or more	29.57		37.29		13.68		19.79	
Income valid or missing/imputed								
Valid	89.91		90.06		93.16		85.42	
Missing/imputed	10.09		9.94		6.84		14.58	
Contacts with older people								
Less than weekly	21.12		20.72		20.69		23.16	
Weekly or more	78.88		79.28		79.31		76.84	
	M	SD	M	SD	M	SD	M	SD
Age (years)	48.77	5.49	48.80	5.41	48.70	5.87	48.75	5.39
Knowledge about aging (0-25)	14.03	3.00	14.58	2.99	13.13	2.81	13.03	2.79***

Note: Race/ethnic differences tested with chi-square for categorical variables or ANOVA for continuous variables: \* $p \leq .05$ ; \*\* $p \leq .01$ ; \*\*\* $p \leq .001$ .

baby boomers, a higher percentage of White non-Hispanics were married, reported being in excellent or good health, graduated from college, had incomes over \$75,000, and had greater knowledge about aging. Interestingly,



**Table 2.** Aging Anxiety Among Baby Boomers (40 to 58 Years) in AARP Images of Aging Study, 2004, by Key Analytic Variables ( $n = 575$ )

	N	Aging anxiety		
		Mean (unweighted)	SD	p value (t test)
<b>Race/ethnicity</b>				
Non-Hispanic white (reference)	362	14.93	4.64	—
African American	117	15.64	4.72	.16
Hispanic	96	16.75	5.15	< .001
<b>Education</b>				
High school or less (reference)	220	16.68	4.75	
Some college	166	14.57	4.77	< .001
College graduate or more	186	14.54	4.48	< .001
<b>Household income</b>				
Less than \$35,000 (reference)	197	16.86	4.62	—
\$35,000 to less than \$75,000	189	14.80	4.62	< .001
\$75,000 or more	189	14.40	4.76	< .001
<b>Knowledge about aging</b>				
Below mean (< 14) (reference)	314	16.32	4.92	—
Mean or above (14+)	261	14.24	4.37	< .001
<b>Contact with older people</b>				
Less than weekly (reference)	121	16.67	4.50	—
Weekly or more	452	15.01	4.80	< .001
Total sample	575	15.38	4.79	—

there were no gender or age differences across the three ethnic groups. No racial/ethnic differences were observed with regard to frequency of contact with older adults.

In Table 2 we examined differences in the degree of aging anxiety across key analytic subgroups. In pairwise comparisons, we found that Hispanics had significantly greater aging anxiety than White non-Hispanics. African Americans were not significantly different than White non-Hispanics. As

expected, respondents in the lowest education or income group had significantly greater aging anxiety than those in the two higher education or income groups. Those with below average factual knowledge about aging had greater anxiety than those with above average knowledge, and those having less than weekly contact with older adults exhibited greater anxiety when compared to those having more exposure to older people.

We present estimates from multiple regression analyses in Table 3. We first estimate a baseline model, then sequentially enter mediating variables with replacement, and finally enter all mediating variables simultaneously. Given that there is no a priori rationale to guide the ordering of mediating variables, we use this inclusion strategy to discern which variables serve as more powerful mediators of racial/ethnic effects.

In Model 1 we note that Hispanics tended to have greater aging anxiety than White non-Hispanics when controlling for age, gender, marital status, and health. Among the control variables, younger and less healthy respondents reported greater anxiety than older and healthier respondents. In Models 2 through 4, we added three variables that are proposed to mediate ethnic/race effects—education and income, knowledge about aging, and contact with older adults.

When education and income variables are added in Model 2, we observed the same pattern as in the bivariate tests, with lower education and lower income respondents reporting greater anxiety than those in the two higher education and higher income categories. The variable signifying that income was imputed was not significant. This supports the validity of the imputed measure. The effect for Hispanics ceased to be statistically significant with the addition of education and income, the difference from White non-Hispanics declining from 1.50 to 1.19 in magnitude.

In Model 3, we added knowledge about aging and found that less knowledge tended to increase anxiety. The coefficient for Hispanics was not significant in this equation and drops to .97, a proportionate decline of 35% in magnitude.

In Model 4, contact with older people was added to the equation. As before, those having weekly or greater contact with older people had less aging anxiety than those with less contact. The coefficient for Hispanics remained significant in this equation, but falling to 1.4 in magnitude.

Finally, we added all mediating variables in Model 5. All four factors (education, income, knowledge, and contact) were statistically significant in the predicted direction. As with Models 2 and 3, the coefficient for Hispanic was not significant compared to Model 1, showing considerably lower magnitude—declining by more than half a point (.68) to .82.

We further tested the interaction effects of race/ethnicity on education, income, knowledge of aging, and contacts with older adults. However, none of these were significant (see Table 4).

**Table 3. Multiple Regression Equations Predicting Aging Anxiety Among Baby-Boomers (40 to 58 Years) in AARP Images of Aging Study, 2004 (n = 575)**

Independent variable	Model 1 estimate	SE	Model 2 estimate	SE	Model 3 estimate	SE	Model 4 estimate	SE	Model 5 estimate	SE
African American <sup>a</sup>	0.286	0.62	0.19	0.61	-0.06	0.62	0.26	0.62	-0.03	0.61
Hispanic <sup>a</sup>	1.50*	0.67	1.19	0.67	0.97	0.68	1.41*	0.67	0.82	0.67
Age	-0.09*	0.04	-0.09*	0.04	-0.07*	0.04	-0.10**	0.04	-0.09*	0.04
Female <sup>b</sup>	0.48	0.39	0.51	0.39	0.31	0.38	0.50	0.39	0.43	0.38
Married <sup>c</sup>	-0.38	0.42	0.10	0.44	-0.31	0.41	-0.32	0.41	0.17	0.44
Health good or excellent <sup>d</sup>	-2.01***	0.49	-1.46**	0.50	-1.74***	0.49	-1.92***	0.49	-1.27*	0.49
Some college <sup>e</sup>			-1.43**	0.47					-1.16*	0.48
College graduate or more <sup>e</sup>			-1.04*	0.53					-0.72	0.53
Income \$35,000 to \$74,000 <sup>f</sup>			-1.14**	0.50					-0.99*	0.49
Income \$75,000 or more <sup>f</sup>			-1.31*	0.57					-1.28*	0.57
Income missing <sup>g</sup>			-0.37	0.67					-0.40	0.67
Knowledge about aging					-0.27***	0.07			-0.17*	0.07
Weekly or more contact with older people <sup>h</sup>							-1.40**	0.48	-1.44**	0.47
Intercept	20.93***	1.82	21.79***	1.84	24.10***	1.95	22.36***	1.88	25.04***	2.01
R <sup>2</sup>	0.06		0.09		0.09		0.07		0.12	

Note: Data are weighted to reflect national distributions based on age, gender, education, and race/ethnicity.

- a. Reference = White non-Hispanic.
- b. Reference = male.
- c. Reference = not married.
- d. Reference = fair or poor health.
- e. Reference = high school or less.
- f. Reference = income less than \$35,000.
- g. Reference= income is valid/reported.
- h. Reference= less than weekly contact with older people.

\*p ≤ .05; \*\*p ≤ .01; \*\*\*p ≤ .001.

**Table 4.** Multiple Regression Equations With Interaction Terms Predicting Aging Anxiety Among Baby Boomers (40 to 58 Years) in AARP Images of Aging Study, 2004 ( $n = 575$ )

Interaction terms	Model 1 estimate	SE	Model 2 estimate	SE	Model 3 estimate	SE
African American $\times$ Some College	0.76	1.35				
Hispanic $\times$ Some College	-0.84	1.66				
African American $\times$ College Graduate or More	0.98	1.94				
Hispanic $\times$ College Graduate or More	-0.98	2.12				
African American $\times$ Income \$35,000 to \$74,000	-1.20	1.36				
Hispanic $\times$ Income \$35,000 to \$74,000	0.06	1.58				
African American $\times$ Income \$75,000 or More	-1.07	2.17				
Hispanic $\times$ Income \$75,000 or More	0.11	1.95				
African American $\times$ Knowledge of Aging			-0.17	0.21		
Hispanic $\times$ Knowledge of Aging			-0.04	0.22		
African American $\times$ Weekly or More Contact With Older People					-0.42	1.42
African American $\times$ Weekly or More Contact With Older People					2.37	1.52

Note: Each model controlled for age, gender, race/ethnicity, marital status, health, education, knowledge about aging, and contact with older people.

## Discussion

The aging of American baby boomers and the increasing racial and ethnic diversity of the U.S. population suggest that it is important to better understand the concerns and worries of this large but hardly homogeneous birth

cohort. In this investigation we examined aging anxiety with a focus on the two largest ethnic groups in the United States: African Americans and Hispanics.

Stereotypic views of older people can be due to a lack of knowledge about older age and lack of close interactions with older people (Ory et al. 2003). In this study, we found that low education, income insufficiency, inaccurate perceptions of the old, and lack of exposure to older adults elevated aging anxiety among middle-aged baby boomers. Although Hispanics were more anxious about aging than non-Hispanic Whites, this difference was mediated by other factors, primarily lack of knowledge about old age and aging processes. Misconceptions about aging held by Hispanics that result in greater aging anxiety may be related to access to media accounts or lack of representations of positive aging.

Although the effect for African Americans was not statistically significant in any model, patterns in the strength and direction of the effect was consistent with our predictions. Controlling for knowledge about aging reduced the difference between African Americans and White non-Hispanics to virtually zero, suggesting that accurate perceptions of the old matter. However, that African American baby boomers did not have significantly greater anxiety about aging than the objectively more advantaged White non-Hispanics is surprising in light of their lower than average income and worse than average health. It may be that appraisals about the future are shaped by a wider set of factors that include cultural values that grant a more privileged place for older adults and the expected reliance on kinship networks.

Among the control variables, we found that younger baby boomers were more anxious than older baby boomers, a finding consistent with the notion that anxiety is greater for events that are perceived more negatively than they are experienced. We did not find gender difference in aging anxiety among baby boomers despite research showing that women generally experience more anxiety about their aging than do men (Cummings et al. 2000; Lynch 2000). Relatively recent historical changes may have reduced gender inequalities in labor force participation and benefits, minimizing differences between men and women with regard to their level of anxiety about old age.

Similarly, no significant marriage effect was found in our study, despite prior studies having found that marriage decreases aging anxiety (Barrett and Robbins 2008). Being divorced or never married is historically more normative for baby boomers and therefore perhaps less likely to be perceived as a threat to old age security and happiness compared to earlier cohorts. Having

good health was associated with a lower level of aging anxiety, no doubt a result of projecting current concerns about physical health status into the future when assessing the quality of life in old age.

Overall, the sample scored only slightly better than chance in their knowledge test, suggesting that expectations about old age are largely unrealistic and that their evaluations were based on false notions about what it means to be old. The gap between perception and reality of aging suggests that unrealistic impressions are cause for fear about growing old. Whether those misperceptions serve as motivation to engage in purposeful action, such as saving for retirement or taking preventive health measures, or serve to stifle such action by increasing despair is a topic well worth studying in the context of how anxiety can be reduced or marshaled toward positive outcomes.

It is important to note that our study has limitations that deserve discussion. First, the cross-sectional nature of the data did not permit us to investigate how aging anxiety changes with time and in response to historical events such as devaluation of retirement assets. Second, we employ a relatively simple measure of income and do not include more durable assets such as home ownership that may assuage aging anxiety. Third, we used the Palmore's FAQ to measure knowledge about basic factual information about aging in this study despite critiques that it actually measures "attitudes" (Klemmack 1978). Therefore, it is important to examine the validity of the Palmore's FAQ with regard to the functions for which it was specifically developed (Brubaker and Powers 1976). Finally, it would have been useful to have more detail about personal health status and the health status of loved ones to better gauge how the anticipation of aging is shaped by one's current needs and the circumstances of those who serve as role models for old age.

The expectation of growing older is shaped by realistic and unrealistic fears about old age. Our research suggests that these fears may be modified somewhat. Increasing contact with older adults may provide some comfort about growing old, as our research suggests, but realizing this to any extent will likely take greater age integration of social institutions. Improving resource sufficiency at midlife will improve the outlook on old age, but given the current economic downturn, we are likely to see baby boomers as a whole having reduced retirement resources. On the other hand, increasing knowledge about aging may provide a practical way to promote a more accurate conception of aging that will allay fears about growing old. Interventions that offer public education about aging in the schools, through the media, and in the public discourse may offset much of the misinformation about old age that is communicated through the negative portrayals of the aged that are pervasive in our society.

## Acknowledgments

The authors would like to thank Alexis Abramson, PhD, for her leadership in developing this study and the AARP. We also thank Norella Putney, PhD, for her comments in the development of an earlier version of the article.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the authorship and/or publication of this article.

## Funding

The author(s) disclosed receipt of the following financial support for the research and/or authorship of this article:

The authors gratefully acknowledge funding support from AARP for the Images of Aging project. We also thank Alexis Abramson, PhD, for her invaluable contribution in making this project a reality.

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